

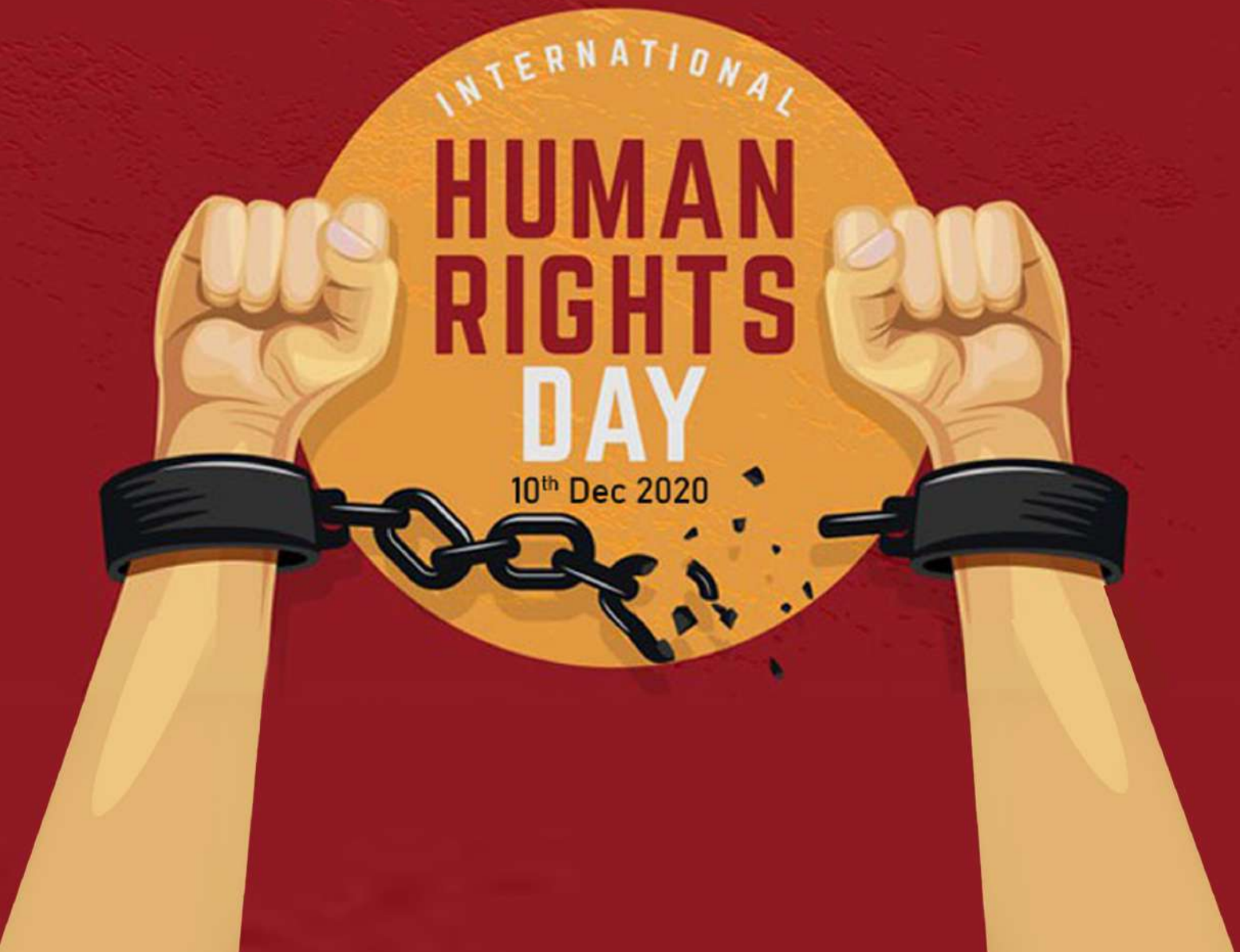


SIVARAJAVEL IAS ACADEMY

SANGAMAM

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INDEX

Sl.No	Contents	Page No
1	TAMILNADU NEWS	5
2	NATIONAL NEWS	8
3	INTERNATIONAL NEWS	15
4	ECONOMY NEWS	20
5	PROGRAMS AND YOJANAS	22
6	SCIENCE AND TECH	32
7	ENVIRONMENT NEWS	40
8	REPORTSAND INDICES	45
9	SPORTS NEWS	47
10	PERSONALITIES	50
11	AWARDS	54
12	DEFENCE NEWS	57
13	BOOKS AND AUTHORS	60
14	APPOINTMENT	61
15	IMPORTANT DAYS	63
16	TNPSC BITS	70
17	ART AND CULTURE	72
18	2022 AUG MONTH QUESTIONS	76



Artificial Intelligence (AI)-generated NFT (non-fungible token)

- In a first for any Indian state, Tamil Nadu - has launched its own Artificial Intelligence (AI)-generated NFT (non-fungible token) representing the state.
- Titled 'Netru, Indru, Nalai' (Yesterday, Today and Tomorrow), the NFT showcases the past, present and future of the state
- It was launched by the state IT minister Mano Thangaraj on November 30 at the TechNext 2022 Web3 conference organized by Confederation of Indian Industry (CII) in Chennai.
- The NFT is set to be auctioned, and the proceeds will be used to set up a Web 3 Centre of Excellence (CoE) in the state.

Chennai's Third Botanical garden

- Chennai's third botanical garden – to come up soon on a sprawling 137 hectare (338 acres) space on the city's outskirts.
- The state environment department has finalised the location, Kadambur village along GST Road in Chengalpet district.
- The garden will be home to climate resilient plants and will also have plants that will suit the weather conditions of Chennai
- It is being planned under the Green Tamil Nadu Mission as part of the effort to increase the state's green cover from the current 23.7% to 33%.

Metaverse, Web 3.0

- Metaverse, Web 3.0 and other technologies to propel State's \$1 trillion economy dream.
- A thriving and a vibrant culture has been noticed across the broad spectrum of new age technologies, including Metaverse, Web 3.0, Blockchain and others in Tamil Nadu, according to a report by the Confederation of Indian Industry (CII) and KPMG.
- The report titled 'Metaverse and web 3.0 opportunities in India – Nurturing Tamil Nadu's growth ambitions through nextgen technologies' pointed out that all major Information Technology (IT) companies in Tamil Nadu are focusing on Metaverse and Web 3.0 technologies via metaverse design, development, testing and support services.

SIPCOT Industrial Park

- Tamil Nadu Chief Minister M K Stalin has inaugurated an industrial park at Eraiyur in Tamil Nadu's Perambalur district. He also laid the foundation stone for the Phoenix Kothari Footwear Park.
- The inauguration of the 243.39-acre park of the State Industries Promotion Corporation of Tamil Nadu (Sipcot) followed an announcement in the 2022-23 budget session that new parks would be set up in Coimbatore, Perambalur, Madurai, Vellore and Tiruvallur districts.

Tamil Nadu Police, Idol Wing - Non-Fungible Tokens (NFT)

- The Tamil Nadu Police, Idol Wing - has launched its own non-fungible tokens (NFT) to award members of Idol Wing unit as rewards.
- This initiative will make Tamil Nadu Police the second police force in the world after Dubai to mint its own NFTs.
- Further, Tamil Nadu Police's Idol Wing has become the first police unit in the world to mint Soulbound Tokens (SBTs), a non-transferable form of NFT, as "Digital Medals" to motivate officers in the wing to make exceptional contributions.

Bharat Urea

- Southern Petrochemical Industries Corporation (SPIC) - has become the first company in Tamil Nadu to start the supply of the indigenously manufactured urea, 'Bharat Urea'.
- The bags will carry information about the production cost, maximum selling price including taxes and subsidy offered by the Union government.
- This is based on the new design prescribed under the Centre's 'One Nation One Fertilizer' policy.

G20 Summit - Tamilnadu

- The Union government has planned to hold around 200 meetings in 32 sectors at multiple locations across the country, including Tamil Nadu.
- Chennai has been tentatively chosen as one

of the host cities for the meetings.

- India assumed the G20 presidency for a year beginning December 1, with the theme inclusiveness, “one earth-one family-one future”.
- Tamil Nadu has successfully staged Modi-Xi Jinping summit at Mamallapuram in 2019, followed by the successful conduct of the 44th edition of the Chess Olympiad with active participation of players from 180 countries recently.

Verbal Autopsy Project

- The pilot of the verbal autopsy project – will be launched in Karur and Krishnagiri districts in the state.
- The verbal autopsy is a process aimed at improving medical certification of home deaths.
- Under the project, a team of 20 health workers will soon visit households in Karur and Krishnagiri districts to conduct verbal autopsies.

First Woman Mace-Bearer

- D Lalitha - was appointed as the first woman mace-bearer of the Madurai bench of Madras high court.
- Lalitha is serving as a macebearer to Justice N Mala of the Madurai bench.
- A mace-bearer is a person who walks in front of a judge (or any other dignitaries), clearing the way for them to enable easy navigation in the corridors of the court.
- In general, the post has been traditionally held by men, who carries the mace and walks before a dignitary signifying their power.

India's First Drone Skilling and Training Virtual e-learning Platform

- On December 6, Union Minister for Youth Affairs and Sports, and Information and Broadcasting Anurag Singh Thakur - inaugurated India's first drone skilling and training virtual e-learning platform in Chennai.
- During the occasion, Thakur also launched the first of 1000 planned Drone Centre of Excellence at Garuda Aerospace's Manufacturing unit in Chennai.
- The Union Minister also flagged off Garuda Aerospace's Drone Yatra, 'Operation 777' at Agni College of Technology, Chennai.

PM SVANidhi Scheme – Karur Corporation

- Karur corporation - has topped among 20 municipal corporations in Tamil Nadu in facilitating loans to street vendors under the Centre's PM SVANidhi scheme.
- Among other corporations, Tambaram corporation stood second while Trichy corporation has come third.
- Karur corporation covered 88% of vendors while Tambaram corporation disbursed loan to 80% of its target.

Umagine Chennai

- Electronics Corporation of Tamil Nadu Limited (ELCOT) - will be organising Asia's largest summit on technology and innovation, 'Umagine Chennai', between March 23 and 25, 2023, at the Chennai Trade Centre.
- The theme of the Conference is “Leave the future behind”.
- Umagine Chennai 2023 is a key initiative towards the state aspiring to become a trillion-dollar economy by 2030.

Climate Change Mission

- Tamil Nadu is set to become the first state to launch its own Climate Change Mission.
- It had launched the Green Tamil Nadu Mission last September and the Tamil Nadu Wetlands Mission this August.
- A Special Purpose Vehicle—the Tamil Nadu Green Climate Company (TNGCC)—will implement the State Climate Action Plan.

Ayushman Bharat health and wellness centres

- Tamil Nadu - won the award at the national level for making the highest number of teleconsultations at Ayushman Bharat health and wellness centres.
- During the campaign held between October 12 and December 8, there were 22.5 lakh teleconsultations made by the state.
- National Health Mission (Tamil Nadu) director Shilpa Prabhakar Satish received the award.
- The National Universal Health Coverage Day was celebrated through an event held in Varanasi, Uttar Pradesh, with the theme “Build the World We Want: A Healthy Future for All” on December 10.

Insecticides Act, 1968

- The Tamil Nadu government - has prohibited the sale and use of phosphorus paste (rat poison) or any preparation containing the substance under the Insecticides Act, 1968.
- As per the government order, the sale, stocking, exhibition and use of “six highly toxic pesticides” harmful to human beings and animals have been banned for 60 days.
- They have been prohibited by Tamil Nadu as per provisions under the Insecticides Act 1968 (Central Act 46 of 1968).

Sustainable Municipal Infrastructure Financing (SMIF)

- The Tamil Nadu government - has signed a loan agreement with German Development Bank, KfW for Rs.4,250 crore Sustainable Municipal Infrastructure Financing (SMIF).
- The objective of the third phase of SMIF is on environment-related urban infrastructure, especially improving the capacity of urban local bodies in water supply and sewage disposal.
- The objective of the programme is to protect the environment, preserve the natural resources and improve the quality of life of the urban population.

Sponge Parks

- Greater Chennai Corporation - will set up 47 ‘sponge parks’, which will store flood water and recharge ground water, thereby solving the issue of inundation of city roads.
- Work order for five such parks has been issued and another 42 will be tendered out this month.
- The project will include construction of mini ponds and trenches at the parks.
- The trenches will carry water from roads and storm water drains into the ponds.

Namma School Foundation

- On December 19, Tamil Nadu chief minister M K Stalin – launched the ‘Namma School Foundation’ project.
- The new initiative aims to improve infrastructure of State government-run schools with private participation.
- During the event, Namma school portal (<https://nammaschool.tnschools.gov.in>) and school virtual pavilion were also launched by the Chief Minister.

Friends of Library

- Tamil Nadu government launches ‘Friends of Library’ programme.
- The ‘Friends of Library’ programme, under which books would be directly given to those who are unable to access state-run libraries, was introduced by the Tamil Nadu government.
- The project will be helpful to people with disabilities, seniors, kids, and hospital in-patients, among others, who are unable to visit a library. Volunteers will hand over the books to such people from the libraries

Aadhaar mandatory

- Tamil Nadu government makes Aadhaar mandatory for all its schemes.
- The Tamil Nadu government has announced that all those who are eligible for benefits under various government schemes will have to submit proof of having an Aadhaar number.

Project Nilgiri Tahr

- The Tamil Nadu government – has unveiled the Project Nilgiri Tahr, and allocated an initial funding of Rs 10 crore for the project.
- The state environment, climate change and forest department has issued orders on December 28 for setting up ‘The Nilgiri Tahr’ project that seeks to ensure the protection and conservation of the animal.
- The Nilgiri tahr is recognised as the state animal of Tamil Nadu



NATIONAL NEWS



Urban-20

Under the G20, the Ministry of Housing and Urban Affairs is organizing the Urban 20 event in Ahmedabad.

-

What is The Urban 20 (U20) Summit?

- It is a city diplomacy initiative launched on December 12, 2017, at the One Planet Summit in Paris.
- Urban-20 (U20) provides a platform for cities from G20 countries to facilitate discussions on various important issues of urban development including climate change, social inclusion, sustainable mobility, and affordable housing, and propose collective solutions.
- C40 Cities (C40) and United Cities and Local Governments (UCLG) convene the U20 under the leadership of a Chair city that rotates annually, based in the G20 host country.
- The U20 2023 Cycle will be chaired by the City of Ahmedabad.
- Ahmedabad will showcase its unique urban development and climate change initiatives and rich culture and heritage to the participants.

Traditional Knowledge Digital Library (TKDL)

Recently, the Indira Gandhi National Centre for the Arts and the CSIR-TKDL signed a Memorandum of Understanding.

About:

- The MoU aims at cooperation related to digitization and inclusion of information

on traditional knowledge of India from manuscripts and traditional cultural expressions.

- It will facilitate efforts towards protection and preservation of the manuscript knowledge for current and future times, through inclusion of the information into the TKDL database.
- It is also expected to enable digitization and inclusion of non-written, oral and audio-visual materials related to traditional knowledge and traditional cultural expressions into the TKDL.

What is CSIR-TKDL?

- The Traditional Knowledge Digital Library (TKDL) is a pioneering Indian initiative, jointly by the CSIR and Ministry of AYUSH.
- Aim: To prevent exploitation and to protect Indian traditional knowledge from misappropriation by way of wrongful Intellectual Property Rights.
- The TKDL contains Indian traditional medicine knowledge from classical/traditional texts related to Ayurveda, Unani, Siddha and Sowa Rigpa, and Yoga techniques in a digitized format and is available in five international languages (English, French, German, Spanish and Japanese) to patent examiners.

International Financial Services Centres Authority (IFSCA)

Recently IFSCA and the Council on Energy, Environment and Water (CEEW) have signed a Memorandum of Understanding (MoU). The MoU between these two organisations will help mutual assistance and cooperation in the area of sustainable finance.

What is IFSCA?

- It is a statutory authority established under the International Financial Services Centres Authority Act, 2019 (“IFSCA Act”).
- Mandate: To develop and regulate the financial products, financial services, and financial institutions in the International Financial Services Centres (‘IFSC’).
- The IFSCA aims to develop a strong global connection and focus on the needs of the Indian economy as well as to serve as an

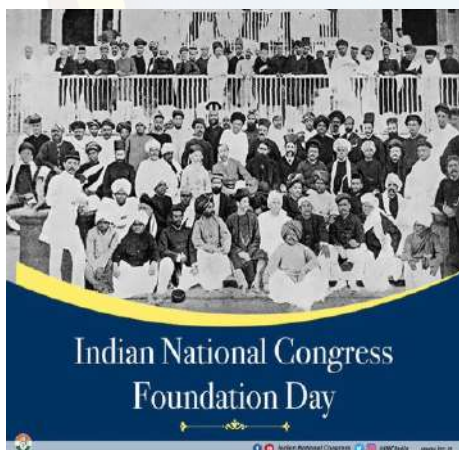
international financial platform for the entire region.

- Before the establishment of IFSCA, the domestic financial regulators, namely, RBI, SEBI, PFRDA and IRDAI regulated the business in IFSC.
- GIFT-IFSC is the maiden IFSC in India.
- Who are the Members of the IFSCA?
- The International Financial Services Centres Authority consist of nine members, appointed by the central government.
- They will include the chairperson of the authority, a member each from the RBI, SEBI, the Insurance Regulatory and Development Authority, and the Pension Fund Regulatory and Development Authority.
- Two members from the Ministry of Finance. In addition, two other members will be appointed on the recommendation of a Selection Committee.
- Term: All members of the IFSC Authority will have a term of three years, subject to reappointment.

Congress Foundation Day

The Indian National Congress (INC), India's largest opposition party, marked its 138th foundation day on December 28.

About:



How the Congress was founded?

-
- The English bureaucrat Allan Octavian Hume or AO Hume is credited as the founder of the organisation.
- On December 28, 1885, 72 social reformers, journalists and lawyers congregated for the first session of the INC at Gokuldas Tejpal Sanskrit College, Bombay.
- At that point, the aim of this group was not to demand independence from the ongoing

colonial rule but to influence the policies of the British government in favour of Indians.

Transformation towards the demand for independence

- Over the next few years, the party's work continued, to shift the colonial administrators' attitudes and policies on the rights and powers allowed to Indians.
- The party largely consisted of educated, upper-class people who were likely to have studied abroad. But with time, this grouping became more diverse, as the organisation began setting up provincial organisations.
- At its Eleventh Session in 1895, there was an increase in the number of delegates from 1,163 the previous year to 1,584. President Surendranath Banerjea congratulated the Congress for bringing together "the scattered element of a vast and diversified population."

Splits and reconvening

- In Surat in 1906, the divisions between the 'moderates' led by Gopal Krishna Gokhale and Surendranath Banerjea, and the 'extremists' led by Bal Gangadhar Tilak came to the fore and there was a split. While Tilak and Lala Lajpat Rai wanted the Congress to boycott the visit of the Prince of Wales in protest against the Bengal Partition a year prior, the moderates opposed any such move.
- But by 1915, the Bombay session saw these two groups coming together again as one.

Goa Liberation Day

December 19 is celebrated as Goa Liberation Day.

About:

- The day is celebrated annually to mark the success of 'Operation Vijay' undertaken by the Indian armed forces to defeat Portuguese colonial forces and liberate Goa in 1961.
- Operation Vijay:
- Operation Vijay - a 36-hour military operation (started on December 18, 1961 and concluded on December 19, 1961), was about the liberation of the Portuguese territories of Goa, Daman and Diu.
- This was possibly the Indian armed forces' first tri-service operation.
- The Indian Air Force bombed the Portuguese airbase at Dabolim while the army advanced from the north and east into Goa.
- The Indian Navy was tasked with preventing hostile action by Portuguese warships, securing access to Mormugao harbour, and

securing the Anjadip Island off the coast of Karwar.

- By the evening of December 19, 1961, Portuguese Governor General Vassalo De Silva had signed the surrender document after Indian armed forces (led by the army and backed by the air force and navy) had outnumbered and outgunned the Portuguese.

Geographical Indication (GI) Tag

Kerala's five agricultural products recently got GI Tag. With the latest five GIs, 17 agricultural products of Kerala facilitated by the Kerala Agricultural University have received the GI status.

About:

- Attappady Attukombu Avara (beans), Attappady Thuvara (red gram), Onattukara Ellu (sesame), Kanthalloor-Vattavada Veluthulli (garlic), and Kodungalloor Pottuvellari (snap melon) are the latest Geographical Indications that have been registered.
- The unique features of the products, imparted by the agro-climatic conditions of the geographical area of their production, are the basis for getting a geographical indication tag.

Wayanad Rice Festival

- A Kerala-based organisation named Thanal has embarked on a unique conservation experiment, planting 300 climate-resilient varieties of traditional rice on 1.5 acres of land at its agroecology centre in Panavally in the Wayanad district.
- About Wayanad Rice Festival:
- The initiative aims to sensitise people to the significance of conserving traditional crops that have the ability to withstand harsh climatic conditions.
- Thanal has been organising annual "rice field weeks" since 2012.
- The festival also sets the stage for knowledge sharing and co-creation of knowledge between tribal farmers and experts.
- Thanal also launched the Rice Diversity Block (RDB) at Panavally under the Save Our Rice campaign in 2009, with a collection of 30 varieties of rice.
- Most of the varieties were collected from Kerala, Karnataka, Assam, Tamil Nadu, Arunachal Pradesh, Maharashtra and West Bengal.
- Many varieties are drought-resistant and flood-tolerant, while others have aromatic and medicinal properties.

- The Thondy variety, a traditional and popular rice among the people in Wayanad a few decades ago, could compete with any hybrid rice in terms of productivity.
- Black rice varieties are rich in minerals like zinc, iron and other nutrients.
- India had nearly 1.5 lakh varieties of rice, with about 3,000 varieties unique to Kerala..

Prahari App

Recently Union Home Minister launched 'Prahari' app for Border Security Force (BSF) Jawans.

About:

- BSF 'Prahari' app is a great example of Proactive Governance, now Jawans can get personal and service related information, housing, Ayushman-CAPF and leave related information on their mobile.
- Other features of the app include:
- Availability of Bio Data
- Grievance redressal on "Centralized Public Grievance Redress and Monitoring System" (CP-GRAMS)
- information on various welfare schemes.
- The app will also connect the Jawans with the portal of the Ministry of Home Affairs.
- The Border Security Force (BSF)
- It is India's border guarding organisation on its border with Pakistan and Bangladesh.
- It is one of the seven Central Armed Police Forces (CAPF) of India, and was raised in the wake of the 1965 war on 1 December 1965.
- It comes under the Ministry of Home Affairs.
- BSF contributes its personnel every year for UN Missions.

E-sports

Recently, India has officially recognised Esports as a part of 'multisport event'.

About:

- The President of India, amended the regulations governing eSports in accordance with the authority "conferred by clause (3) of Article 77 of the Constitution" and requested the Sports Ministry and the Ministry of Electronics and Information Technology to include "Esports as part of multi-sports events."
- According to a gazette notification, E-Sports will now be a part of the "multisports event" category in India. E-Sports will be taken care of by Department of Sports under the Ministry

of Youth Affairs and Sports. Meanwhile, 'Online Gaming' will be under MEITY (Ministry of Electronics and Information Technology).

- E-Sports, short for electronic sports, is a form of competition using video games.

North Eastern Council (NEC)

The Golden Jubilee of the NEC, being celebrated in Shillong on the 18th December 2022, will be graced by the Hon'ble Prime Minister as the Chief Guest.

About:

- North Eastern Council (NEC) is under the administrative purview of Ministry of Development of the North-Eastern Region (MDoNER).
- NEC is not a constitutional body, but a statutory organization established under the North Eastern Council Act, 1971, as amended in 2002.
- It is the nodal agency for the economic and social development of the North Eastern Region which consists of the eight States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.
- The Council comprises Governors and Chief Ministers of constituent States and three members nominated by the President.

India Internet Governance Forum (IGF)



The India Internet Governance Forum (IGF), a multi stakeholder platform, is conducted a three-day hybrid event from December 9 to December 11, 2022.

About:

- The India Internet Government Forum is an initiative associated with the UN Internet Governance Forum (UN-IGF).
- The Internet Governance Forum (IGF) is a multi-stakeholder platform bringing representatives together from various groups, all at par to discuss public policy

issues related to the Internet.

- The event's goal is to discuss the roadmap to digitization and to reaffirm India's place on the global stage by emphasising its role and importance in international policy development on internet governance.
- Theme of IIGF 2022: 'Leveraging Techade for Empowering Bharat'.
- India Internet Governance Forum(IIGF) has been constituted in conformance to IGF-Paragraph 72 of the Tunis Agenda of the UN-based Internet Governance forum (IGF).

District Disability Rehabilitation Centres (DDRC)

Parliamentary Standing Committee on Social Justice and Empowerment has recently stated that the Union government is "somewhat casual" in its approach to complete District Disability Rehabilitation centres (DDRC).

About:

- It is an initiative by the Ministry of Social Justice and Empowerment, Govt. of India, to facilitate comprehensive services to Persons with Disabilities in the rural areas.
- It is a joint venture of Central and State Governments wherein Central Government will establish, initiate, implement the centre for three years involving funding for man power contingencies as well as required equipments and coordination.
- State Government will provide provision for rent free, well connected building, basic infrastructure, furniture, monitoring and coordination of activities through District Management Team (DMT) Chaired by the District Collector and also identification of implementing agency.
- These centres are run jointly by District Management Team headed by DM/Collector and a reputed NGO (Usually Indian Red Cross Society).
- To upscale their services, a MODEL DDRC has been conceptualised by the Department of Empowerment of Persons With Disability in the Ministry of Social Justice and Empowerment Government of India.
- Nine such model DDRCs, namely- Badaun, Pilibhit, Barielly, Balaghat, Golaghat, Ahmedabad, Amravati, Kullu and Rampur have been upgraded to MODEL DDRC level in the first phase.

New India Literacy Programme

Recently Government of India announced a New India Literacy Programme for the year 2022-23 to 2026-27

- About New India Literacy Programme:
- Objectives: It aims to support the States and Union Territories in promoting literacy among non-literates in the age group of 15 and above.
- Components: (i) Foundational Literacy and Numeracy (ii) Critical Life Skills, (iii) Vocational Skills Development, (iv) Basic Education and (v) Continuing Education.
- Coverage: The programme aims to cover a target of 5.00 crore learners during the five years under Foundational Literacy and Numeracy component.
- Funding:
- The Central and State shares are in the ratio of 60:40 for all States.
- North Eastern Region (NER) and Himalayan States where the sharing pattern between the Centre and the State is in the ratio of 90:10.



- For UTs with legislature the ratio is 60:40, except in the UT of Jammu & Kashmir where the ratio is 90:10
- For all other UTs without legislature the Central share is 100%.

India International Science Festival

- 8th edition of India International Science Festival will be held in Bhopal
- About India International Science Festival:
- It was first held in Delhi in 2015.
- Over all six editions of IISF have been organized since then in northern, southern and the eastern regions of the country.
- It is an initiative of Ministry of Science and Technology and Ministry of Earth Science of Government of India in association with Vijnana Bharati

Aim:

- To show the ways how science, technology, engineering and mathematics (STEM) provide us with the solutions to improve

our lives.

- It is a science movement with Swadeshi spirit lead by eminent scientists of the country.

Environment Education, Awareness and Training (EEAT)

- Recently Environment Education scheme has been revamped into Environment Education Programme.
- About Environment Education, Awareness and Training (EEAT):
- It is a Central Sector scheme implemented by Ministry of Environment, Forest and Climate Change .
- Objective: To promote environmental awareness and mobilize students' participation for environment conservation.
- Under this Scheme there are two major programmes namely Green Corps (NGC) Programme and National Nature Camping Programme (NNCP)
- Green Corps (NGC) Programme:
- Under this scheme more than 1 lakh Eco-clubs have been formed in schools and colleges to educate students and to spread awareness on environmental
- A financial assistance of Rs 5,000/- per Eco-club used to be provided under this programme with a ceiling of 500 school Eco-clubs per district and 100 college Eco-clubs per State.
- National Nature Camping Programme (NNCP)
- Under this scheme ,organization of field visits/ nature camps in different Protected Areas/ Nature Parks/ Tiger Reserves of the country for students were supported.
- These camps provided 'nature experience' to students and had huge potential to trigger their sensitivity towards nature and its conservation.

Zonal Council

- Union Home Minister will attend the Eastern Zonal Council meeting in Kolkata on December 17, 2022

About:

- The idea of creation of Zonal Councils was mooted by the first Prime Minister of India, Pandit Jawahar Lal Nehru in 1956.
- The Zonal Councils are the statutory bodies.
- They are established by an Act of the Parliament, that is, States Reorganisation Act of 1956.
- The act divided the country into five zones (Northern, Central, Eastern, Western and Southern) and provided a zonal council for

each zone.

- The present composition of each of these Zonal Councils is as under:
- The Northern Zonal Council, comprising the States of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, National Capital Territory of Delhi and Union Territory of Chandigarh;
- The Central Zonal Council, comprising the States of Chhattisgarh, Uttarakhand, Uttar Pradesh and Madhya Pradesh;
- The Eastern Zonal Council, comprising the States of Bihar, Jharkhand, Orissa and West Bengal;
- The Western Zonal Council, comprising the States of Goa, Gujarat, Maharashtra and the Union Territories of Daman & Diu and Dadra & Nagar Haveli;
- The Southern Zonal Council, comprising the States of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and the Union Territory of Puducherry.
- North Eastern Council:
- The North Eastern States i.e. (i) Assam (ii) Arunachal Pradesh (iii) Manipur (iv) Tripura (v) Mizoram (vi) Meghalaya and (vii) Nagaland are not included in the Zonal Councils and their special problems are looked after by the North Eastern Council, set up under the North Eastern Council Act, 1972.
- The State of Sikkim has also been included in the North Eastern Council vide North Eastern Council (Amendment) Act, 2002 notified on 23rd December 2002.
- What is the organisational structure of Zonal Councils?
- Chairman - The Union Home Minister is the Chairman of each of these Councils.
- Vice Chairman - The Chief Ministers of the States included in each zone act as Vice-Chairman of the Zonal Council for that zone by rotation, each holding office for a period of one year at a time.
- Members- Chief Minister and two other Ministers as nominated by the Governor from each of the States and two members from Union Territories included in the zone.
- Advisers- One person nominated by the Planning Commission for each of the Zonal Councils, Chief Secretaries and another officer/Development Commissioner nominated by each of the States included in

the Zone.

India Water Impact Summit

Union Minister for Jal Shakti recently inaugurated the 7th Edition of India Water Impact Summit.

About

- 7th Edition of India Water Impact Summit:
- The Summit aims at giving an insight into the potential causes for divergence and formulating strategy to achieve convergence.
- It is organised by NITI Aayog at Dr Ambedkar International Centre (DAIC), 15 Janpath, New Delhi.
- Experts from the country and abroad are discussing ways to protect the small rivers in large river basins.
- Theme:
- 'Restoration and Conservation of Small Rivers in a Large Basin' with emphasis on the select aspects of 'Mapping and Convergence of 5Ps' - People, Policy, Plan, Programme and Project.
- Finance Forum:
- The summit will also host the "Finance Forum", a special track that will bring together global financial institutions and investors interested in river restoration and conservation programmes.
- The 2022 summit, like earlier summits, will also provide an opportunity to dozens of technology and innovation companies from around the world that are keen to bring their solutions to India to address various issues and concerns pertinent to our river basins.

GHAR Portal

Recently National Commission for Protection of Child Rights (NCPCR), has developed and launched this portal

About:

- The portal - "GHAR - Go Home and Re-Unite" will be a platform for information on children from every district to smoothen the process of their repatriation and restoration.
- Salient features of the portal
- Digital tracking and monitoring of children who are in the Juvenile Justice system and have to be repatriated to another Country/State/District.
- Digital transfer of cases of children to the concerned Juvenile Justice Board/Child Welfare Committee of the State. It will help in speedy repatriation of children.
- Where there is a requirement of a translator/interpreter/expert, request will be made to the concerned State Government.
- Child Welfare Committees and District

Child Protection Officers can ensure proper restoration and rehabilitation of children by digitally monitoring the progress of the case of the child.

- A checklist format will be provided in the forms so that the children who are being hard to repatriate or children who are not getting their entitled compensation or other monetary benefits can be identified.
- List of Government implemented schemes will be provided, so that at the time of restoration the Child Welfare Committees can link the child with the schemes to strengthen the family and ensure that child remains with his/her family.

National Bamboo Mission (NBM)

The Union Agriculture Minister had approved the formation of an Advisory Group for streamlining the development of the Bamboo sector.

About:

- Restructured National Bamboo Mission approved by the Cabinet Committee on Economic Affairs (CCEA) on 25-04-2018. It mainly focuses on the development of a complete value chain of the Bamboo sector to link growers with consumers
- The Restructured National Bamboo Mission is a centrally sponsored scheme (CSS).
- Aim:
- The Mission envisages promoting holistic growth of bamboo sector by adopting an area-based, regionally differentiated strategy and to increase the area under bamboo cultivation and marketing.
- Under the Mission, steps have been taken to increase the availability of quality planting material by supporting the setting up of new nurseries and strengthening of existing ones.
- Objectives:
- To increase the area under bamboo plantation in non forest Government and private lands to supplement farm income.
- To improve post-harvest management through establishment of innovative primary processing units near the source of production.
- To promote product development keeping in view market demand, by assisting R&D, entrepreneurship etc.

Juvenile Justice (Care and Protection of Children) Act, 2015

- The Act provides for protection of children in need of care and protection and those in conflict with law by catering to their basic needs through care, protection, development, treatment and social re-integration.
- The Child Welfare Committees have been empowered to take decisions with regard to the children in need of care and protection for the best interest of the children.
- Every State Government has to constitute a District Child Protection Unit (DCPU) for every district to take up matters relating to children.
- To ensure effective coordination in the Child Safety, Protection and Development; District Magistrates have been made the head of DCPU. DMs have been empowered to review the functioning of DCPU and CWCs at regular intervals to ensure prompt decisions



Kunming-Montreal Agreement

The 15th Conference of Parties (COP15) to the UN Convention on Biological Diversity (CBD) adopted the Kunming-Montreal Global Biodiversity Framework (GBF) on December 19, 2022.

About

What is Kunming-Montreal Global Biodiversity Framework (GBF)?

- The framework has 23 targets that the world needs to achieve by 2030.
- The countries will monitor and report every five years or less on a large set of indicators related to progress.
- The Global Environment Facility has been requested to establish a Special Trust Fund to support the implementation of the Global Biodiversity Framework (“GBF Fund”).

What are the key provisions?

Conservation, protection and restoration:

- Countries committed to protecting 30% of land and 30% of coastal and marine areas by 2030, fulfilling the deal’s highest-profile goal, known as 30-by-30.
- The deal also aspires to restore 30% of degraded lands and waters throughout the decade, up from an earlier aim of 20%.
- And the world will strive to prevent destroying intact landscapes and areas with a lot of species, bringing those losses “close to zero by 2030”.

Group of Friends

India has recently launched a ‘Group of Friends’ to promote accountability for crimes against peacekeepers.

About:

- This Group of Friends will act as a platform to promote accountability for all acts of violence against the United Nations peacekeepers by facilitating support to the host state, creating awareness, exchanging information, sharing best practices, supporting initiatives, and mobilizing

resources.

- Bangladesh, Egypt, France, India, Morocco and Nepal have joined the group as co-chairs to promote accountability for crimes against peacekeepers.
- Group of Friends represents the “political will” of member states, particularly of the troop and police contributing countries, to champion the implementation of the provisions of U.N. Security Council resolution 2589, which was adopted in August last year under India’s Presidency of the Council.
- Resolution 2589 had called upon member states, hosting or having hosted United Nations peacekeeping operations, to take all appropriate measures to bring to justice perpetrators of the killing of, and all acts of violence against United Nations personnel, including, but not limited to, their detention and abduction.

United Nations Security Council (UNSC)

The UK, France, and UAE have extended their support for India’s permanent membership at the United Nations Security Council (UNSC). India is holding the presidency of United Nations Security Council for the month of December 2022.

About United Nations Security Council (UNSC):

- The United Nations Charter established six main organs of the United Nations, including the UN Security Council (UNSC).
- UNSC has the primary responsibility for the maintenance of international peace and security.
- Under the Charter of the United Nations, all Member States are obligated to comply with Council decisions.
- The Security Council takes the lead in determining the existence of a threat to the peace or act of aggression.
- The Security Council has permanent residence at the United Nations Headquarters in New York City.

Powers:

- Establishment of peacekeeping operations
- Establishment of international sanctions
- Authorization of military action through Security Council resolutions

Members:

- The U.N. Charter provides for 15 members on the UNSC:
- 5 permanent members known as P5, including United Kingdom, China, France, Russia and the US.
- They have veto power over decisions of UNSC.
- 10 non-permanent members
- UNSC non-permanent membership:
- Each year the 193-member General Assembly elects five non-permanent members for a two-year term at the UNSC.
- The 10 non-permanent seats are distributed on a regional basis:
- 5 for African and Asian countries (3 are for Africa and 2 for Asia)
- Note: There is an informal understanding between the Africa and Asia to reserve one for an Arab country. The Africa and Asia Pacific group takes turns every two years to put up an Arab candidate.
- 1 for Eastern European countries
- 2 for Latin American and Caribbean countries
- 2 for Western European and other countries

ASEAN Consensus

Indonesian Foreign Minister recently said India and other countries should “respect” and follow the ASEAN’s policy on Myanmar rather than taking a “different path.

About:

ASEAN’s five points Consensus are

- It states that there shall be an immediate cessation of violence in Myanmar.
- All parties shall exercise utmost restraint; constructive dialogue among all parties concerned shall commence to seek a

peaceful solution in the interests of the people.

- A special envoy of the ASEAN Chair shall facilitate mediation of the dialogue process, with the assistance of the secretary-general of ASEAN.
- ASEAN shall provide humanitarian assistance through the AHA Centre (ASEAN Coordinating Centre for Humanitarian Assistance on disaster management).
- The special envoy and delegation shall visit Myanmar to meet with all parties concerned.

ASEAN

- It is a group of Association of Southeast Asian Nations, which was established in 1967 with the signing of the Bangkok declaration.
- Founding members: Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Presently ASEAN comprises 10 member states namely Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Laos, Myanmar, Cambodia and Vietnam.
- It promotes intergovernmental cooperation and facilitates economic, political, security, military, educational, and sociocultural integration between its members and other countries in Asia.

G20 Digital Innovation Alliance (G20-DIA)

Recently, the Minister for Electronics & Information Technology launched G20-DIA as a part of India’s G20 presidency.

About:

- Objective: To identify, recognize, and enable the adoption of innovative and impactful digital technologies developed by start-ups, from G20 nations as well as the invited non-member nations,
- It can address the needs of humanity in the six critically important sectors i.e Agri-tech, Health-tech, Ed-tech, Fin-tech, Secured Digital Infrastructure, and Circular Economy.
- Startup products in these six sectors enabled through Digital Public Goods Infrastructure can create a global population-scale impact and reduce the digital divide and enable

sustainable, and inclusive techno-socio-economic development.

- This summit which will be held in Bangalore on the sidelines of the Digital Economy Working Group (DEWG) meeting will be a multi-day program where top nominated startups from each of the theme areas from all of the G20 countries and the non-member invited countries will showcase their solutions to the global community of investors, mentors, corporates, and other government stakeholders.
- This will create cutting-edge digital solutions in the six themes that bridge the digital divide between different segments of humanity and advance the world economy.

Asian Development Bank (ADB)

Recently, India and ADB sign a \$125 million loan to improve Urban Services in Tamil Nadu.

About:

- The Government of India and the ADB signed a \$125 million loan to develop climate-resilient sewage collection and treatment, and drainage and water supply systems in three cities in the state of Tamil Nadu.
- The financing is the third and the last tranche of the \$500 million multi-tranche financing facility (MFF) for the Program approved by ADB in 2018 to build priority water supply, sewerage, and drainage infrastructure in strategic industrial corridors across 10 cities in the state. The tranche 3 loan covers Coimbatore, Madurai, and Thoothukudi.
- This financing will help ensure universal access to basic water and sanitation services and improve resilience against floods in the project target areas which are also the industrial hubs of Tamil Nadu

What is ADB?

- It is a regional development bank established on 19th December 1966.
- It envisions a prosperous, inclusive, resilient, and sustainable Asia and the Pacific while sustaining its efforts to eradicate extreme poverty in the region.
- Headquarters: Manila, Philippines.
- Members: 68 members, 49 from within Asia.

- Japan holds the largest proportion of shares in ADB followed by the USA, because Japan is one of the largest shareholders of the bank, and the president has always been Japanese.
- ADB is an official United Nations Observer.



ASIAN DEVELOPMENT BANK

International Conference on “J C Bose: A Satyagrahi Scientist” Organized in New Delhi

- On the occasion of 164th birth anniversary of legendary Indian scientist Acharya Jagadish Chandra Bose and as part of Azadi Ka Amrit Mahotsava, Vijnana Bharati and Ministry of Culture, Govt. of India organized an “International conference on the contributions of J C Bose: A Satyagrahi Scientist”, at Inter-University Accelerator Centre, New Delhi.

Acharya Jagadish Chandra Bose was a biologist, physicist, botanist and an early writer of science fiction.

- Bose discovered wireless communication and was named the Father of Radio Science by the Institute of Electrical and Electronics Engineering.
- He was responsible for the expansion of experimental science in India.
- Bose is considered the father of Bengali science fiction. A crater on the moon has been named in his honour.
- He founded Bose Institute, a premier research institute of India and also one of its oldest. Established in 1917, the Institute was the first interdisciplinary research centre in Asia. He served as the Director of Bose Institute from its inception until his death.
- To facilitate his research, he constructed automatic recorders capable of registering extremely slight movements, these instruments produced some striking results, such as quivering of injured plants, which Bose interpreted as a power of feeling in plants.

About His Writings:

- His books include Response in the Living and Non-Living (1902) and The Nervous

Mechanism of Plants (1926)... Read more at: <https://currentaffairs.adda247.com/international-conference-on-j-c-bose-a-satyagrahi-scientist-organized-in-new-delhi/>

India Hosts Conclave of NSAs of Central Asian Countries

- This is the first time India is hosting a conclave of top security officials from Central Asian countries including Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan focussing on the evolving security situation in Afghanistan and ways to deal with the threat of terrorism emanating from that country

More About This Development:

- In November last year, India hosted a regional dialogue on the situation in Afghanistan that was attended by NSAs of Russia, Iran, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
- But it is the first time that India is hosting the top security officials of the central Asian countries.
- The meeting, notably, coincides with the 30th anniversary of the establishment of diplomatic ties between India and the Central Asian countries

3rd Global High-Level Ministerial Conference on Anti-Microbial Resistance (AMR)

- The Third Global Ministerial Conference on Antimicrobial Resistance concluded in Oman, with the issue of The Muscat Manifesto, which aims to accelerate One Health actions on antimicrobial resistance to achieve the 2030 Sustainable Development Goals.
- Union Minister of State for Health and Family Welfare Bharati Pravin Pawar had participated in the 'Third Global High-Level Ministerial Conference on Antimicrobial Resistance'

9th World Ayurveda Congress and Arogya Expo 2022 Inaugurated in Goa

- The World Ayurveda Congress & Arogya Expo 2022 will be held in Goa from 8-11 December with an objective to provide a global platform to stakeholders, including industry leaders, practitioners, traditional healers, educationists, students, medicine

manufacturers, etc. for networking and engaging in intellectual exchange to strengthen the Ayurveda sector, envision its future, and facilitate interaction between professionals and consumers to boost Ayurveda commerce

Anurag Thakur Inaugurated India's 1st Drone Training Conference

- Towards empowering and mobilising farmers across the nation with the use of agri-drones, Information and Broadcasting Minister Anurag Singh Thakur inaugurated India's first Drone Skilling and Training Virtual E-Learning Platform at the Chennai manufacturing facility of Garuda Aerospace, a drone-based startup of India
- The Minister, simultaneously flagged off Garuda Aerospace's drone yatra, 'Operation 777' which will educate and demonstrate the efficacy of drones for different agricultural uses across 777 districts in India

About Garuda Aerospace:

- Garuda Aerospace is a Chennai-based start-up dealing in drone technology, and its Kisan Drones are fitted with sensors, cameras, and sprayers and help in increasing food crop productivity, reducing crop loss, reduce farmer exposure to harmful chemicals.

Celebration of "Universal Health Coverage (UHC) Day 2022" in Varanasi

- The Union Ministry of Health and Family Welfare is organizing a two-day convention on the theme " Universal Health Coverage Day (UHC) 2022" on December 10 and 11, 2022, in Varanasi, Uttar Pradesh
- It is noteworthy that in the year 2017, the United Nations officially declared 12 December as " International Universal Health Coverage Day ". This year theme of UHC Day " Build the World We Want: A Healthy Future for All " (Creating the World We Want: A Healthy Future for All), underlining the importance and role of health cover in building a healthy future for all.

1st G20 Central Bank Deputies Meet in Bengaluru Under India's Presidency

- The first G20 Finance and Central Bank Deputies (FCBD) meeting is scheduled to be held during 13-15 December 2022 in Bengaluru.

- This meeting, which will mark the start of discussions on the Finance Track agenda under the Indian G20 Presidency, will be hosted jointly by the Ministry of Finance and the Reserve Bank of India

8th India International Science Festival 2022 to be held in Bhopal

- India International Science Festival (IISF)-2022:
- India International Science Festival (IISF)-2022 will be held in Bhopal in January 2023 and incidentally, it is one of the major events to be held after India took over G-20 Presidency.
- IISF is the initiative of the Ministry of Science & Technology and Ministry of Earth Science of Government of India in association with Vijnana Bharati which is a science movement with swadeshi spirit led by eminent scientists of the country. The IISF 2022 is the eighth edition since its inception in 2015

PM Modi to Inaugurate National Youth Conference in Karnataka on 12 January 2023

- Karnataka Chief Minister Basavaraj Bommai said that a National Youth festival is poised to be hosted at Hubballi-Dharwad twin cities, which will be inaugurated by Prime Minister Narendra Modi.
- The National Youth Festival will be organized on January 12 in connection with the birth anniversary of Swami Vivekananda



Gold Bonds

RBI has announced the Sovereign Gold Bond Scheme 2022-23 - Series III, which will be open for subscription from December 19 to December 23.

About Gold Bonds:

- Gold bonds are government securities denominated in grams of gold.
- They are substitutes for holding physical gold.
- Investors have to pay the issue price in cash and the bonds will be redeemed in cash on maturity.
- The bond is issued by the RBI on behalf of the government.
- These bonds offer a superior alternative to holding gold in physical form.
- The risks and costs of storage are eliminated.
- Investors are assured of the market value of gold at the time of maturity and periodical interest.
- It's free from issues like making charges and purity in the case of gold in jewellery form.
- The bonds are held in the books of the RBI or in demat form eliminating risk of loss.
- While the tenor of bonds is eight years, it can be redeemed after five years.

The Minimum Tax on Big Businesses

Members of the European Union recently agreed in principle to implement a minimum tax of 15% on big businesses.

What is Minimum Tax on Big Businesses?

- European Union members have agreed to implement a minimum tax rate of 15% on big businesses in accordance with Pillar 2 of the global tax agreement framed by the Organisation for Economic Cooperation and Development (OECD) in 2021.
- Under the OECD's plan, governments will be equipped to impose additional taxes in case companies are found to be paying taxes that are considered too low.
- This is to ensure that big businesses with global operations do not benefit by domiciling themselves in tax havens in order to save on taxes.
- Pillar 1 of the OECD's tax plan, on the

other hand, tries to address the question of taxing rights.

- Large multinational companies have traditionally paid taxes in their home countries even though they did most of their business in foreign countries.
- The OECD plan tries to give more taxing rights to the governments of countries where large businesses conduct a substantial amount of their business.
- As a result, large U.S. tech companies may have to pay more taxes to governments of developing countries.

Carbon Markets

The Energy Conservation (Amendments) Bill, 2022, passed by the Rajya Sabha recently, has several significant features. It will foster a carbon market in India, through the creation of a National emissions trading system (National ETS).

What are carbon markets?

- Article 6 of the Paris Agreement provides for the use of international carbon markets by countries to fulfil their nationally determined contributions (NDCs).
- Carbon markets are essentially a tool for putting a price on carbon emissions— they establish trading systems where carbon credits or allowances can be bought and sold.
- A carbon credit is a kind of tradable permit that, per United Nations standards, equals one tonne of carbon dioxide removed, reduced, or sequestered from the atmosphere.
- Carbon allowances or caps, meanwhile, are determined by countries or governments according to their emission reduction targets.
- A United Nations Development Program released recently noted that interest in carbon markets is growing globally, i.e, 83% of NDCs submitted by countries mention their intent to make use of international market mechanisms to reduce greenhouse gas emissions.

What are the types of carbon markets?

- There are broadly two types of carbon markets:
- compliance markets and
- voluntary markets

Third Largest Economy

The Centre for Economics and Business Research (CEBR), a British consultancy, has said India will become third largest economy by 2035 from the current fifth spot.

About:

- In its annual World Economic League Table, the Centre for Economics and Business Research said that over the next five years, India's annual rate of GDP growth is expected to average 6.4 percent after which growth is expected to average 6.5 percent in the subsequent nine years.
- CEBR also adds that by 2037, world gross domestic product will be doubled as developing economies will catch up with the richer ones.
- The shifting balance of power will see the East Asia and Pacific region account for over a third of global output by 2037, while Europe's share shrinks to less than a fifth.
- The global economy will face recession in 2023 mainly due to rises in interest rates by the central banks to arrest higher inflation.
- The global economy surpassed 100 trillion Dollar for the first time in 2022, but will stall in 2023 as policy makers continue their fight against soaring prices.

IIFL Launches India's First Passive Tax-Saving Fund

- IIFL Mutual Fund has launched India's first passive tax saver fund, almost six months after the Securities and Exchange Board of India (Sebi) introduced the passive alternative in the Equity Linked Savings Scheme (ELSS) space

RBI Emerges As The Largest Gold Buyer Among The Central Banks Across The Globe.

- With 132.34 metric tonnes (MT) of gold purchase, RBI emerged as the largest buyer of the yellow metal among central banks between April 2020 and September 2022. Also, RBI was the top gold buyer among its peers in 2020 while it stood third in 2021.
- In 2020, it bought 41.68 MT of gold while in 2021 and 2022 (till September end) it bought 77.5 MT and 31.25 MT respectively
- Every major central bank keeps a portion of its reserves in gold as it plays a fine hedging instrument in the time of uncertainty and economic turmoil. During the balance of payment crisis in 1990-91, Indian government pledged 67 MT of gold to

the Bank of England and Union Bank of Switzerland.

Social Stock Exchange

- One of the leading stock exchanges in India – The National Stock Exchange of India (NSE) received in-principle approval from the capital markets regulator Securities Exchange Board of India (Sebi) to set up a Social Stock Exchange (SSE) as a separate segment.
- An SSE allows the listing of non-profit or non-government organisations on stock exchanges, providing them with an alternative fund-raising structure.
- Countries like the UK, Canada and Brazil have SSEs.
- The fund-raising is proposed through several instruments such as zero-coupon-zero-principal bonds, social venture funds and mutual funds

RBI to Auction Green Bonds in 2 Tranches of ₹8,000 Crore each in Jan, Feb

- The Reserve Bank of India (RBI) will auction ₹16,000 crore of sovereign green bonds (SGrBs) in two tranches. The RBI will auction 5-year and 10-year green bonds worth ₹4,000 crore each on 25 January and on 9 February, and this would be a uniform price auction.

What are Green Bonds:

- Green bonds are issued by companies, countries and multilateral organisations to exclusively fund projects that have positive environmental or climate benefits and provide investors with fixed income payments.
- The projects can include renewable energy, clean transportation and green buildings, among others.
- Proceeds from these bonds are earmarked for green projects. This is unlike standard bonds, the proceeds of which can be utilised for various purposes at the discretion of the issuer.
- The international green bond market has seen cumulative issuance worth more than USD 1 trillion since market inception in 2007.
- By the end of 2020, 24 national governments had issued Sovereign Green, Social and Sustainability bonds totalling a cumulative USD 111 billion dollars, according to the London-based Climate Bonds Initiative



PROGRAMS AND YOJANAS

Krishi Ude Desh Ka Aam Naagrik (Krishi Udan 2.0) Scheme

58 airports will be covered under Krishi Udan Scheme 2.0

About:

- Krishi Udan Scheme 2.0 was announced on 27 October 2021.

What is the objective?

- The main objective of the Krishi Udan Scheme 2.0 is to increase share of air carriage in the modal mix for transportation of Agri-produce, which includes horticulture, fishery, livestock and processed products.
- The scheme assists farmers in transporting agriculture products so that it improves their value realisation.
- The Scheme aims to ensure seamless, cost-effective, time bound, air transportation and associated logistics for all Agri-produce originating especially from North-East, hilly and tribal regions of the country.
- Few successful examples are air transportation of 'King Chillies, Burmese Grapes & Assamese Lemon' from Gauwahati, 'Jackfruit' from Tripura and 'Litchi' from Darbhanga.

Pradhan Mantri Surakshit Matritva Abhiyan programme (PMSMA)

- The Government of India has said that more than three crore sixty lakh pregnant women have received comprehensive antenatal care under the Pradhan Mantri Surakshit Matritva Abhiyan programme across all States and Union Territories.

About:

- The Pradhan Mantri Surakshit Matritva Abhiyan has been launched by the Ministry of Health & Family Welfare (MoHFW), Government of India.
- The program aims to provide assured, comprehensive and quality antenatal care, free of cost, universally to all pregnant women on the 9th of every month.
- It guarantees a minimum package of antenatal care services to women in their 2nd / 3rd trimesters of pregnancy at designated government health facilities.
- The programme follows a systematic

approach for engagement with private sector which includes motivating private practitioners to volunteer for the campaign developing strategies for generating awareness and appealing to the private sector to participate in the Abhiyan at government health facilities.

- It envisages to improve the quality and coverage of Antenatal Care (ANC) including diagnostics and counselling services as part of the Reproductive Maternal Neonatal Child and Adolescent Health (RMNCH+A) Strategy.

Objectives of the program:

- Ensure at least one antenatal checkup for all pregnant women in their second or third trimester by a physician/specialist
- Improve the quality of care during ante-natal visits. This includes ensuring provision of the following services:
 - All applicable diagnostic services
 - Screening for the applicable clinical conditions
 - Appropriate management of any existing clinical condition such as Anaemia, Pregnancy induced hypertension, Gestational Diabetes etc.
 - Appropriate counselling services and proper documentation of services rendered
 - Additional service opportunity to pregnant women who have missed ante-natal visits
 - Identification and line-listing of high risk pregnancies based on obstetric/ medical history and existing clinical conditions.
 - Appropriate birth planning and complication readiness for each pregnant woman especially those identified with any risk factor or comorbid condition.
- Special emphasis on early diagnosis, adequate and appropriate management of women with malnutrition.
- Special focus on adolescent and early pregnancies as these pregnancies need extra and specialized care.
- One of the critical components of the Abhiyan is identification and follow up of high risk pregnancies.
- A sticker indicating the condition and risk factor of the pregnant women would be added onto MCP card for each visit:

- Green Sticker- for women with no risk factor detected
- Red Sticker – for women with high risk pregnancy

Mission Shakti

The Union Ministry of Women and Child Development has taken a number of initiatives to empower women through the schemes and programmes implemented in the country.

About:

- The Ministry of Women and Child Development has formulated ‘Mission Shakti’, an Integrated Women Empowerment Programme, as Umbrella Scheme for the Safety, Security and Empowerment of Women for implementation during the 15th Finance Commission period.
- It aims at strengthening interventions for safety, security and empowerment of women in a mission mode through institutional and convergence mechanism for greater efficiency, effectiveness and financial prudence.
- The Umbrella Scheme of Mission Shakti has two sub-schemes namely:
- “Sambal” for safety and security of women and “Samarthya” for empowerment of women.
- Under ‘Samarthya’ sub- scheme, a new component i.e. Hub for Empowerment of Women (HEW) has been included with the aim to facilitate inter-sectoral convergence of schemes and programs meant for women at the Central, State/ UT and District levels for creating an environment in which women are able to realize their full potential.
- The support under the HEW provides for guiding, linking and hand holding women to various institutional and schematic set ups for their empowerment and development including access to healthcare, quality education, career and vocational counseling/ training, financial inclusion, entrepreneurship, backward and forward linkages, health and safety for workers, social security and digital literacy at districts/ Blocks/ Gram Panchayats level across the country.

PM Street Vendor’s AtmaNirbhar Nidhi scheme

The Centre has recently extended the PM Street Vendor’s AtmaNirbhar Nidhi (PM SVANidhi) scheme beyond till December 2024.

About:

- The government has also introduced third loan of upto Rs 50,000 in addition to first and second loans of Rs 10,000 and Rs 20,000, respectively.
- PM SVANidhi was launched by the Ministry of Housing and Urban Affairs on June 01, 2020 for providing affordable Working Capital loan to street vendors to resume their livelihoods that have been adversely affected due to Covid-19 lockdown.
- Scheme Benefits
- Vendors can avail a working capital loan of up to Rs. 10,000, which is repayable in monthly instalments in the tenure of one year.
- On timely/ early repayment of the loan, an interest subsidy @ 7% per annum will be credited to the bank accounts of beneficiaries through Direct Benefit Transfer on quarterly basis.
- There will be no penalty on early repayment of loan.
- The scheme promotes digital transactions through cash back incentives up to an amount of Rs. 100 per month.
- The vendors can avail the facility of escalation of the credit limit on timely/ early repayment of loan.
- Implementation agency: Small Industries Development Bank of India (SIDBI)

What is SAMARTH Scheme?

Recently, the Central government stated that under SAMARTH scheme, more than 13,235 artisans have been trained in the last three years.

About SAMARTH Scheme:

- Government of India launched the “Scheme for Capacity Building in Textile Sector (SCBTS)” which is called SAMARTH, for the entire value chain of textiles except Spinning and Weaving in the organized sector, for a period of three years from 2017-18 to 2019-20.

Objectives:

- To provide demand-driven, placement-oriented National Skills Qualifications Framework (NSQF) compliant skilling programmes to incentivize and supplement the efforts of the industry in creating jobs in the organized textile and related sectors, covering the entire value chain of textile, excluding Spinning and Weaving.
- To promote skilling and skill upgradation in the traditional sectors of handlooms, handicrafts, sericulture and jute.
- To enable the provision of sustainable livelihood either by wage or self-

employment to all sections of the society across the country.

Pradhan Mantri Awaas Yojana – Gramin (PMAY-G):

- The main aim of the scheme is to provide pucca house with some of the basic amenities.
- This scheme is meant for people who do not own a house and people who live in kutcha houses or houses which are severely damaged.
- At present, the minimum size of the houses to be built under the PMAY-G scheme is 25 sq. mt., with a hygienic cooking space.
- Concerned Ministry: Ministry of Rural Development
- Eligibility:
- Beneficiaries are identified using parameters from Socio-Economic and Caste Census (SECC) 2011 data and verified by Gram Sabhas.

Prashasan Gaon ki Ore' Campaign

Union Minister for Personnel, Public Grievances, and Pensions will inaugurate the Prashasan Gaon ki Ore (governance towards village) on December 19, 2022.

About:

- It is a nationwide campaign under the Good Governance Week 2022.
- The Nationwide campaign for Redressal of Public Grievances and Improving Service Delivery will be held in all Districts, States and Union Territories of the country.
- Over 700 District Collectors will participate in the Campaign and officials will be visiting Tehsils and Panchayat Samiti Headquarters.
- Over 3,100 new government services will be added for online delivery during the five-day good governance week.
- The good governance week, or Sushasan Saptah, will witness the nation's grievance redressal platforms functioning in unison — grievances received on Centralised Public Grievance Redress and Monitoring System (CPGRAMS) will be redressed along with grievances received on State portals.

KAVACH' System

The Indian Railways has recently made a provision of Rs 272.30 crore in Financial Year 2022-23 for the implementation of KAVACH.

About:

What is Kavach?

- Indian Railways has indigenously developed an automatic train protection system rechristened as 'Kavach' (Train Collision Avoidance System), to prevent accidents due to human error resulting in Signal Passing at danger and over-speeding.
- It is a set of electronic devices and Radio Frequency Identification devices installed in locomotives, in the signalling system as well the tracks, that talk to each other using ultra high radio frequencies to control the brakes of trains and also alert drivers, all based on the logic programmed into them.
- One of its features is that by continuously refreshing the movement information of a train, it is able to send out triggers when a loco pilot jumps signal, called Signal Passed at Danger (SPAD), a grave offence in railway operations with respect to safety, and the key to accidents like collision.
- The devices also continuously relay the signals ahead to the locomotive, making it useful for loco pilots in low visibility, especially during dense fog.
- Other benefits of 'Kavach' include controlling speed of trains by automatic application of brakes on approach of turnouts, repeating of signal aspects in cab, which is useful for higher speeds & foggy weathers, and auto whistling at level crossing gates.

Startup India Seed Fund Scheme (SISFS)

The Minister of State in the Ministry of Commerce and Industry recently said that 656 Startups are Supported by Approved Incubators under Startup India Seed Fund Scheme (SISFS).

About

What is SISFS?

- Aim: provide financial assistance to startups for proof of concept, prototype development, product trials, market-entry, and commercialization.
- Nodal Department: Department for Promotion of Industry and Internal Trade, under the Ministry of Commerce & Industry.
- An Experts Advisory Committee (EAC) has been created by DPIIT to execute and monitor the Startup India Seed Fund Scheme.
- It is implemented with effect from 1st April

2021 with a corpus of Rs.945 crores.

- Eligibility conditions for startups:
- A startup, recognized by DPIIT, incorporated not more than 2 years ago at the time of application.
- Startups should not have received more than Rs.10 lakh of monetary support under any other Central or State Government scheme.
- Individual entrepreneurs are not eligible to apply for support under the scheme. Only DPIIT-recognized startups can apply for this scheme.
- Shareholding by Indian promoters in the startup should be at least 51% at the time of application to the incubator for the scheme.

NIRMAN Accelerator Program

Recently, the Ministry of Science and Technology has said that 15 Startups are selected for the NIRMAN accelerator program.

About

- This is the first cohort of the NIRMAN Accelerator Program launched by Start-ups Incubation and Innovation Centre (SIIC) IIT Kanpur.
- The accelerator program is supported by the Department of Science and Technology (DST) under the Ministry of Science & Technology through its NIDHI scheme.

What is National Initiative for Developing and Harnessing Innovations (NIDHI) scheme?

- It is an umbrella programme conceived and developed by the Innovation & Entrepreneurship division, Department of Science & Technology.
- Aim: To nurture start-ups through scouting, supporting and scaling innovations.
- Key stakeholders: Various departments and ministries of the central government, state governments, academic and R & D institutions, mentors, financial institutions, angel investors, venture capitalists and private sectors.
- Funding: By the National Science & Technology Entrepreneurship Development Board (NSTEDB).
- NIDHI Accelerator: An accelerator is typically a 3-6 months fast track structured program helping ideas get accelerated to the next orbit.

Objectives of NIDHI-Accelerators

- To fast-track the growth of potential start-ups through rigorous mentoring and networking support in a short span through existing TBIs.
- To attract subject matter experts, mentors,

and angel investors to get associated with technology Business Incubators through structured accelerator programs.

- To build a vibrant start-up ecosystem, by establishing a network between academia, financial institutions, industries and other institutions.
- To act as a hub for several incubators in the region, so that high-potential start-ups can be fast-tracked for increased exposure and validation.

Characteristics of NIDHI -Accelerator Programs

- It is envisaged that 2 broad types of Accelerator Programs will be supported by NSTEDB under this scheme
- Sectoral Programs: These are accelerator programs focused specifically on start-ups focused on a certain sector or theme. For example Smart Cities or healthcare.
- Non-Sectoral Programs: Non-sectoral accelerator programs are most relevant for locations where a critical mass of ventures within a specific sector may not exist.

The poster for the NIRMAN Accelerator Program features the following details:

- Supported By:** Department of Science & Technology, Government of India.
- Organized By:** SIIC IIT Kanpur.
- OFFERINGS:**
 - Deep dive customized support for clinical validation
 - One-on-one mentoring support
 - Structured 6-months program
 - Business & Investor Connect
 - Knowledge Workshops
- CASH AWARD UPTO ₹ 10 LAKHS**
- FUNDING SUPPORT UP TO ₹ 50 LAKHS** for the selected startups, after the program completion.
- only 15 SPOTS**
- APPLY NOW by 5th AUG'22**

Rashtriya Gokul Mission (RGM)

- Rashtriya Gokul Mission envisages development and conservation of indigenous bovine breeds.

About:

- The Department of Animal Husbandry and Dairying is implementing RGM for development and conservation of indigenous bovine breeds since December 2014.
- The scheme is important for enhancing milk production and productivity of bovines to meet the growing demand of milk and making dairying more remunerative for the rural farmers of the country.

Objectives

- To enhance productivity of bovines and

increasing milk production in a sustainable manner using advance technologies.

- To propagate use of high genetic merit bulls for breeding purposes.
- To enhance Artificial insemination coverage through strengthening breeding network and delivery of Artificial insemination services at farmers doorstep.
- To promote indigenous cattle & buffalo rearing and conservation in a scientific and holistic manner.
- Funding Pattern: All the components of Scheme will be implemented on 100% grant-in-aid basis except the components of:
 - accelerated breed improvement programme under the component subsidy of Rs 5000 per IVF pregnancy will be made available to participating farmers as GoI share;
 - promoting sex sorted semen under the component subsidy upto 50% of the cost of sex sorted semen will be made available to participating farmers and
 - establishment of breed multiplication farm under the component subsidy upto 50% of the capital cost maximum upto Rs.2.00 crore of the project will be made available to entrepreneur.



Swadesh Darshan Scheme

Eco-tourism has been identified as one of the Niche Tourism areas for development in the country, including Odisha, by the Ministry of Tourism.

About:

SWADESH DARSHAN

- Implementing Ministry: Ministry of Tourism.

- Type of Scheme: Central Sector Scheme.
- Launched in:2014-15.

Objective:

- Developing critical tourism infrastructure to make India a world class tourist destination.
- This scheme is envisioned to synergise with other schemes like Swachh Bharat Abhiyan, Skill India, Make in India etc. with the idea of positioning the tourism sector as a major engine for job creation, the driving force for economic growth, building synergy with various sectors to enable tourism to realise its potential.

Circuits:

- Under the Scheme 15 circuits have been identified for development namely Himalayan Circuit, North East Circuit, Krishna Circuit, Buddhist Circuit and Coastal Circuit, Desert Circuit, Tribal Circuit, Eco Circuit, Wildlife Circuit, Rural Circuit, Spiritual Circuit, Ramayana Circuit, Heritage Circuit, Tirthankar Circuit and Sufi Circuit.

The Urban Learning Internship Program (TULIP)

The Minister for Housing & Urban Affairs (MoHUA) recently said more than 5,000 internships have been offered under the TULIP.

About The Urban Learning Internship Program (TULIP):

- TULIP is a programme for providing internship opportunities to fresh graduates in all Urban Local Bodies (ULBs) and Smart Cities across the country.
- The Ministry of Housing & Urban Affairs (MoHUA) in collaboration with the Ministry of Education (MoE) and All India Council of Technical Education (AICTE) has developed this programme.
- At the State level, TULIP will be supported by the Urban Development departments in providing a clear roadmap for the ULBs/smart cities to adopt TULIP in their respective organisations.
- Duration: Internship durations can range from eight weeks to one year.

Benefits of the TULIP:

- Enhanced employability through “learning by doing” and opportunity to co-create innovation for cities.
- TULIP interns would get exposure in a large number of areas including but not limited to urban planning, urban design, different branches of engineering, information and technology, mobility, finance, social sector issues and environmental issues.
- Strengthen institutional capacity of the

urban ecosystem and youth engagement towards urban initiatives, creating an ecosystem wherein youth can contribute towards building a liveable city.

- Skilled, high-quality workforce and innovative citizen-centric solutions that help them address critical challenges.

Ayushman Bharat Digital Mission (ABDM)

Over 4 crore health records of citizens digitized and linked with their Ayushman Bharat Health Account (ABHA) numbers under Ayushman Bharat Digital Mission (ABDM)

About:

- It aims to develop the backbone necessary to support the integrated digital health infrastructure of the country. It will bridge the existing gap amongst different stakeholders of Healthcare ecosystem through digital highways.
- With health records linked to their ABHA accounts digitally, citizens will be able to access and manage these records as per convenience. This enables citizens to create a comprehensive medical history across various healthcare providers thereby improving clinical decision-making.
- The ABHA (Ayushman Bharat Health Account) Number:
- It will be used for the purposes of uniquely identifying persons, authenticating them, and threading their health records (only with the informed consent of the patient) across multiple systems and stakeholders.
- This digital linking of individual's health records with ABHA is being carried out extensively across different health facilities of the country with the support of State Governments.

Pradhan Mantri Matsya Sampada Yojana (PMMSY)

Pradhan Mantri Matsya Sampada Yojana envisages insurance coverage to fishers

About:

- PMMSY was launched in September 2020 with an aim to double the income of fish farmers and fishers in the country. It focuses on sustainable development of India's fisheries sector and is a part of the Atmanirbhar Bharat scheme.
- The scheme focuses on activities with potential to generate employment such as seaweed and ornamental fish cultivation. It also emphasises on the breeding technique for quality brood, seed & feed and species

diversification.

Implementation Strategy

- It is an umbrella scheme with two separate Components namely (a) Central Sector Scheme (CS) and (b) Centrally Sponsored Scheme (CSS).
- The CSS Component is further segregated into Non-beneficiary oriented and beneficiary orientated subcomponents/activities under the following three broad heads:
 - Enhancement of Production and Productivity
 - Infrastructure and Post-harvest Management
 - Fisheries Management and Regulatory Framework
- PMMSY will be implemented in all the States and Union Territories for a period of 5 (five) years from FY 2020-21 to FY 2024-25.

Key Initiatives and Progress

- PMMSY includes key activities such as fishing vessel insurance, support for new/upgrade of fishing vessels, aquaculture in saline/alkaline areas, Sagar Mitras, nucleus breeding centres, fisheries and aquaculture start-ups, incubators, and integrated aqua parks.
- PMMSY inter-alia provides insurance coverage to fishers which includes fish workers, fish farmers and any other categories of persons directly involved in fishing and fisheries related allied activities. The insurance coverage provided under the PMMSY includes
 - 5,00,000/- against accidental death or permanent total disability
 - 2,50,000/- for permanent partial disability
 - Hospitalization expenses in the event of accident for a sum of Rs. 25,000/-.

AYURSWASTHYA Yojana

Currently, the Ministry of Ayush is running a Scheme namely, AYURSWASTHYA Yojana

What is AYURSWASTHYA Yojana?

- It is a Central Sector Scheme.
- The objectives of the Centre of Excellence component of AYURSWASTHYA Yojana are:
 - To support establishment of advanced/specialized AYUSH medical health unit in reputed AYUSH and Allopathic institutions both in Government and Non-Government sector.
 - To support creative and innovative proposals for establishment and upgradation of both functions and facilities of reputed

institutions to strengthen competencies of AYUSH professionals in education technology, research & innovation and such other fields necessary for promotion of AYUSH at national as well as international level.

- To support creative and innovative proposals for prestigious organizations which have well-established buildings and infrastructure, and wish to work for AYUSH systems to the level of Centre of Excellence.

About Environmental-Social-Governance (ESG):

- ESG (Environmental, social, and corporate governance) is a term that has been coined to refer to specific data designed to be used by investors for evaluating the material risk that the organization is taking on based on the externalities it is generating.

ESG in India:

- ESG reporting in India commenced in 2009 with the Ministry of Corporate Affairs (MCA) issuing the Voluntary Guidelines on Corporate Social Responsibility.
- With effect from the financial year 2022-2023, filing of Business Responsibility and Sustainability Report (BRSR) has been made mandatory for the top 1000 listed companies (by market capitalization) and has replaced the existing Business Responsibility Reporting (“BRR”).

Water Worlds

Recently scientists have discovered two water worlds which are 218 light years away from the earth.

About:

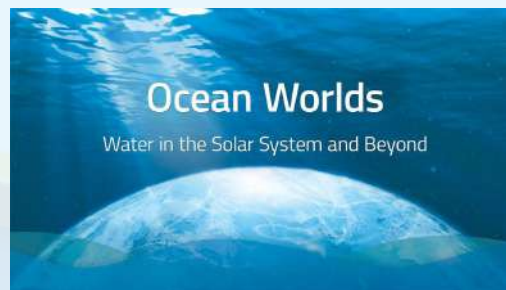
- Two alien planets about 218 light years away from Earth have found a twin in the ocean worlds of Europa and Enceladus-moons orbiting Jupiter and Saturn.

Key findings

- The exoplanets, Kepler-138 c and Kepler-138 d, are likely water worlds a feature that scientists have theorised for a long time.
- These twin planets of the same size and mass are more massive than Earth but lighter than ice giants Uranus and Neptune.
- They are different from the planets in our solar system, which is chiefly composed of rocky planets like Earth and gas giants like Jupiter.
- The Kepler- 138 c and d are made up of ingredients lighter than rock (rocky planets

like Earth) but heavier than hydrogen or helium (gas-giant planets like Jupiter).

- The new planet takes 38 days to complete an orbit.
- It is in the habitable zone, meaning it is located in an orbit that receives just the right amount of heat from its star to allow water to exist in a liquid form.



The National Mobile Monitoring System (NMMS)

Recently, the central government has ordered that digitally capturing attendance is now mandatory for all workers employed under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and will be applicable from January 1, 2023.

About The National Mobile Monitoring System (NMMS):

- It was launched by the Ministry of Rural Development.
- The NMMS App permits taking real-time attendance of workers at Mahatma Gandhi NREGS worksites along with geo-tagged photographs.
- This will increase citizen oversight of the programme besides potentially enabling the processing of payments faster
- This facilitates them to record their findings online along with time-stamped and geo-coordinate tagged photographs for all the schemes of the Department of Rural Development.
- This would also enable better record keeping of inspections by field and supervisory officials and also facilitate analysis of the findings for better programme implementation.

Amrit Bharat Station scheme

- Ministry of Railways has recently formulated a new policy for modernization of stations named “Amrit Bharat Station” scheme

About:

- Amrit Bharat Station scheme envisages development of stations on a continuous basis with a long term vision.
- The scheme will subsume all previous

redevelopment projects where work is yet to begin.

- The scheme aims at preparation of Master Plans of the Railway stations and implementation of the Master Plan in phases to enhance the facilities including and beyond the Minimum Essential Amenities.
- However, plans and consequent budgets will only be approved on the basis of factors such as footfall and inputs from stakeholders. Zonal railways have been given the responsibility of selecting stations, which will then be approved by a committee of senior railway officials.
- The model envisages low-cost redevelopment of stations which can be executed timely.
- The scheme also aims to relocate redundant/old buildings in a cost efficient manner so that space is released for higher priority passenger related activities and future development may be carried out smoothly.

Facilities Planned under Amrit Bharat Station Scheme

- Provision for Roof Plaza to be created in future
- Free Wi-Fi, space for 5G mobile towers
- Smooth access by widening of roads, removal of unwanted structures, properly designed signages, dedicated pedestrian pathways, well planned parking areas, improved lighting etc.
- High level platforms (760-840 mm) at all stations with a length of 600 metres
- Special amenities for the disabled.

Scheme for Economic Empowerment of DNTs (SEED)

Parliamentary panel on Social Justice and Empowerment recently said the process to categorise over 260 DNTs under SC/ST/OBC / list is very slow.

Who are DNTs?

- The term 'De-notified Tribes' stands for all those communities which were once notified under the Criminal Tribes Acts, enforced by the British Raj between 1871 and 1947.
- These Acts were repealed after Independence in 1952, and these communities were "De-Notified".
- The DNTs are the most neglected, marginalized, and economically and socially deprived communities.

What is the SEED scheme?

- It was launched by the Ministry of Social Justice & Empowerment.

Components of the scheme

- Free Coaching: The objective of this component is to enable them to appear in competitive examinations/ admission to professional courses like medicine, engineering, MBA, etc. for obtaining an appropriate job in the Public/Private Sector.
- Health Insurance: The primary objective of the scheme is to provide financial assistance to National Health Authority (NHA) in association with State Health Agencies (SHAs). These agencies will provide a health insurance cover of Rs.5 lakhs per family per year for families as per norms of "Ayushman Bharat Pradhan Mantri Jan Arogya Yojana.
- Livelihood Initiatives: The primary objective of the scheme is to provide financial assistance to National Rural Livelihood Mission (NRLM). It would enhance productivity growth in key livelihood sectors for employment generation through investments in institutional support, and technical assistance.
- Financial support for Housing: It is for those who have not taken benefit of the Pradhan Mantri Awas Yojana as SC, ST, OBC and are living below the poverty line. The admissible support is Rs 1.20 lakhs in plains and 1.30 lakhs in hilly areas (per unit assistance).

Ayushman Bharat Digital Mission (ABDM)

Over 4 crore health records of citizens digitized and linked with their Ayushman Bharat Health Account (ABHA) numbers under Ayushman Bharat Digital Mission (ABDM)

About:

- What it is? It aims to develop the backbone necessary to support the integrated digital health infrastructure of the country. It will bridge the existing gap amongst different stakeholders of Healthcare ecosystem through digital highways.



Ayushman Bharat Digital Mission

- With health records linked to their ABHA accounts digitally, citizens will be able to access and manage these records as per convenience. This enables citizens to create a comprehensive medical history across various healthcare providers thereby

improving clinical decision-making.

- The ABHA (Ayushman Bharat Health Account) Number:
- It will be used for the purposes of uniquely identifying persons, authenticating them, and threading their health records (only with the informed consent of the patient) across multiple systems and stakeholders.
- This digital linking of individual's health records with ABHA is being carried out extensively across different health facilities of the country with the support of State Governments.

Orunodoi' Scheme

10.54 In lakh, the additional number of people will benefit from Assam government's second edition of 'Orunodoi'. With this, the total number of beneficiaries will come to 27 lakh.

About 'Orunodoi' Scheme:



- It is a scheme of the Government of Assam is launched on 2nd October 2020.
- Under 'Orunodoi', monetary benefits have been envisaged for more than 24 lac poor household in the state.
- Government of Assam will provide monthly financial assistance to the eligible beneficiaries for procuring medicines, pulses, and sugar.
- The schematic benefit has been enhanced from 830/- to Rs. 1000/ Women.
- Women being the primary caretakers of the family are kept as beneficiaries of the scheme.
- 'Orunodoi' scheme will provide Financial Assistance of Rs. 1000 per month through Direct Benefit Transfer (DBT) scheme.
- The financial outlay for Orunodoi is ₹4,142 crore per annum.

Beneficiaries:

- The preliminary selection of the beneficiaries will be done at the level of Gaon Panchayat (GP) Village Council Development Committee (VCDC) Urban Local Body (ULB) based on eligibility/

ineligibility conditions.

Gram Nyayalayas

Recently, a Parliamentary panel said the state government's apathy has made Gram Nyayalayas almost defunct and recommended to the Department of Justice to seriously ponder over the further continuation of this scheme.

About:

- The panel said even after more than 12 years of coming into force the Gram Nyayalayas are yet to take off in the country. Only 15 states have notified them and about half of those are yet to be operationalized.

What is Gram Nyayalayas?

- The Law Commission of India, in its 114 Report, had suggested the establishment of Gram Nyayalayas for providing affordable and quick access to justice to the citizens at their doorsteps.
- Gram Nyayalayas or village courts are established under the Gram Nyayalayas Act, 2008 for speedy and easy access to the justice system in the rural areas of India.

Composition:

- The Gram Nyayalayas are presided over by a Nyayadhikari, who will have the same power, enjoy the same salary and benefits as a Judicial Magistrate of First Class.
- Appointment: By the State Government in consultation with the respective High Court.
- Jurisdiction: Over an area specified by a notification by the State Government in consultation with the respective High Court.
- The Court can function as a mobile court at any place within the jurisdiction of such Gram Nyayalaya, after giving wide publicity in that regard.
- They have both civil and criminal jurisdiction over the offences.
- The pecuniary jurisdiction of the Nyayalayas is fixed by the respective High Courts.
- Gram Nyayalayas has been given the power to accept certain evidence which would otherwise not be acceptable under the Indian Evidence Act.

Procedure to be followed:

- Gram Nyayalayas can follow special procedures in civil matters, in a manner it deems just and reasonable in the interest of justice.
- Gram Nyayalayas allow for conciliation of

the dispute and settlement of the same in the first instance.

Appeals:

- An appeal in criminal cases shall lie to the Court of Session, which shall be heard and disposed of within a period of six months from the date of filing of such appeal.
- An appeal in civil cases shall lie to the District Court, which shall be heard and disposed of within a period of six months from the date of filing of the appeal.

Right to Repair Portal

Recently, the Union Minister of Consumer Affairs, Food & Public Distribution unveiled the Right to repair portal.

About Right to Repair Portal:

- On this portal manufacturer will share the manual of product details with customers so that they can either repair it by themselves, or by third parties, rather than depend on the original manufacturers.
- Initially, mobile phones, electronics, consumer durables, automobiles and farming equipment will be covered.
- It allows consumers to repair and modify their consumer products against the manufacturer requiring them to use their services either by restricting access to tools and components or putting in place software barriers.
- From now on India will be joining a clutch of countries like the US and the UK that offer this facility.
- It will save consumers money and contribute to circular economy objectives by improving the life span, maintenance, re-use, upgrade, recyclability, and waste handling of appliances.

New India Literacy Programme

Recently Government of India announced a New India Literacy Programme for the year 2022-23 to 2026-27

About New India Literacy Programme:

- Objectives: It aims to support the States and Union Territories in promoting literacy among non-literates in the age group of 15 and above.
- Components: (i) Foundational Literacy and Numeracy (ii) Critical Life Skills, (iii) Vocational Skills Development, (iv) Basic Education and (v) Continuing Education.
- Coverage: The programme aims to cover a target of 5.00 crore learners during the

five years under Foundational Literacy and Numeracy component.

Funding:

- The Central and State shares are in the ratio of 60:40 for all States.
- North Eastern Region (NER) and Himalayan States where the sharing pattern between the Centre and the State is in the ratio of 90:10.
- For UTs with legislature the ratio is 60:40, except in the UT of Jammu & Kashmir where the ratio is 90:10
- For all other UTs without legislature the Central share is 100%.



Autism Spectrum Disorder (ASD)

Recently, an expert committee appointed by the National Medical Commission ruled out the application of Stem Cell therapy to Autism Spectrum Disorder.



About

- Autism spectrum disorder (ASD) is a developmental disability caused by differences in the brain.
- People with ASD may behave, communicate, interact, and learn in ways that are different from most other people.
- ASD begins before the age of 3 years and can last throughout a person's life, although symptoms may improve over time.
- Symptoms:
- People with ASD often have problems with social communication and interaction, and restricted or repetitive behaviors or interests.
- They may also have different ways of learning, moving, or paying attention.
- Initiatives to Raise Awareness on ASD:
- United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), Sustainable Development Goals deal with rights of people with disabilities including autism.
- The Right of Persons with Disabilities Act, 2016 increased the types of disabilities from 7 to 21.
- It also added autism spectrum disorder among others.

Haemophilia

Recently, U.S. drugmaker Pfizer Inc said that its experimental gene therapy for the treatment of haemophilia B, met its main goal in a late-stage study.

About:

- Data from the study showed that a single dose of the therapy was superior to the current standard of care in helping reduce the bleeding rate in patients with moderately severe to severe forms of haemophilia B.

What is Haemophilia?

- It is a medical condition, mostly inherited, in which the ability of blood to clot is severely reduced.
- This disease is caused by a mutation in one of the genes, that provides instructions for making the clotting factor proteins needed to form a blood clot.
- This change or mutation can prevent the clotting protein from working properly or to be missing altogether. These genes are located on the X chromosome.
- Men are more vulnerable to haemophilia than women. It is a rare disease where in about 1 in 10,000 people are born with it.

Aeronomy

Union Minister of State (Independent Charge) Science & Technology recently informed that ISRO has taken initiatives for feasibility studies on missions to Venus as well as Aeronomy studies.

About Aeronomy:

- The term "aeronomy," coined and introduced about 60 years ago.
- It refers to the scientific study of the upper atmospheric regions of the Earth and other solar system bodies.
- It includes the distribution of temperature, density, and chemical constituents, and the chemical reactions that occur.
- It also includes the studies of aurora, airglow, the ionosphere, Van Allen radiation belts, cosmic rays, and radiative and photochemical phenomena.
- It covers the chemistry, dynamics and energy balance of both neutral and charged particles.

Omega Centauri

Astronomers and scientists at the Indian Institute of Astrophysics (IIA), while studying the Omega Centauri found that hot stars and

white dwarfs emitted less ultraviolet radiation than expected.

About:



- A team of Scientists at the Indian Institute of Astrophysics detected strange hot stars in the Globular clusters using the Ultra Violet Imaging Telescope (UVIT) images on AstroSat (India's first dedicated space observatory, which has been operating since 2015).

What are Globular clusters?

- Globular clusters are spherical aggregates of several thousand to millions of stars bound by gravity. These systems are thought to have formed early on in the Universe and can serve as perfect astrophysical laboratories for astronomers to understand how stars evolve through various phases.
- Omega Centauri is a globular cluster in the constellation of Centaurus that was first identified as a non-stellar object by Edmond Halley in 1677.
- Located at a distance of 17,090 light-years, it is the largest-known globular cluster in the Milky Way at a diameter of roughly 150 light-years.

What is Galaxy?

- A galaxy is a huge collection of gas, dust, and billions of stars and their solar systems bound together by gravity.
- Milky Way, is stuffed with between 100 billion and 400 billion other stars, many of them with planets of their own. The Milky Way got its name from the way it looks from the ground: like a streak of spilt milk across the sky

India's first Dark Night Sky Reserve

Ladakh is all set to have India's first Dark Night Sky Reserve at Hanle village in Changthang region. In about eighteen locations in Hanley,

powerful telescopes will be installed for stargazing.

About:

What is a Dark Sky Reserve?

- The International Dark Sky Association (IDSA) defines an international dark sky reserve (IDSR) as "a public or private land of substantial size (at least 700 km², or about 173,000 acres) possessing an exceptional or distinguished quality of starry nights and nocturnal environment, and that is specifically protected for its scientific, natural, educational, cultural heritage, and/or public enjoyment".
- A dark sky reserve requires a "core" area that has clear sky without any light pollution, which can enable telescopes to see the sky in its natural darkness.
- To support the core, it should be surrounded by a "peripheral" or "buffer" area that supports dark sky values in the core while receiving the same benefits.

Samudrayaan Mission

Union Minister of State (Independent Charge) Earth Sciences recently said that Samudrayaan Mission is aimed at sending three personnel to 6000-metre depth in a vehicle called 'MATSYA 6000'.

About Samudrayaan Mission:

- Samudrayaan Mission is aimed to develop a self-propelled manned submersible to carry three human beings to a water depth of 6,000 meters in the ocean with a suite of scientific sensors and tools for deep ocean exploration.
- The experts will be sent in a manned submersible vehicle called 'MATSYA 6000'.
- This vehicle is being designed and developed by the National Institute of Ocean Technology (NIOT), Chennai under the Ministry of Earth Sciences.
- It has an endurance of 12 hours under normal operation and 96 hours in case of emergency for human safety.
- Manned submersible provides a feel of direct physical presence for researchers and has better intervention capability.
- With the launch of 'Samudrayaan' in October 2021, India joined the elite club of nations such as the US, Russia, Japan, France, and China to have niche technology and vehicles to carry out subsea activities.

Vainu Bappu Observatory

Recently, discoveries of the 40-inch telescope at

the Vainu Bappu Observatory were highlighted at its 50-year celebration.

About Vainu Bappu Observatory:

- Vainu Bappu Observatory is considered one of the most renowned observatories in India it is Located on Javadi Hills at Kavalur, Tamilnadu
- The 40-inch telescope was installed in 1972 and started producing important astronomical discoveries soon after. More than a generation of astronomers were trained at this telescope as well.
- The telescope in the observatory is under the Indian Institute of Astrophysics (IIA), an institute of the Department of Science and Technology (DST)

Other Observatories in India:

- Solar Observatory in Kodaikanal, Tamil Nadu
- Indian Astronomical Observatory in Hanle, Ladakh
- Udaipur Solar Observatory in Udaipur, Rajasthan
- Gauribidanur Radio Observatory in Bangalore, Karnataka.

Oceansat-3

Prime Minister Narendra Modi has recently shared the first satellite images of Gujarat and Arabian Sea sent by the newly launched Oceansat-3 satellite from space.

About:

- ISRO's PSLV-C54 rocket launched the Oceansat-3 along with eight nano satellites, including the Bhutan-SAT, from Sriharikota.
- Oceansat-3 is the third in its set of ocean satellites that are part of India's ocean observation programme.
- It is a multi-sensor observation satellite, which is expected to operate till 2027.
- The Oceansat-3 is envisaged to observe ocean colour data, sea surface temperature (SST) and wind vector data to use in oceanography, climatic and meteorological applications. It also supports value-added products such as potential fishing zones.
- Oceansat-3, in tandem with Oceansat-2, will improve the receptivity of ocean colour measurements to every 24 hour and wind vector measurements to every 12 hour and help predict cyclones better.

Brahmos

Recently, The Indian Air Force (IAF)

successfully test-fired the extended Range Version of Brahmos missile.

About:

- The missile achieved the desired mission objectives in the Bay of Bengal region. With this, IAF has achieved a significant capability boost to carry out precision strikes from SU-30MKI aircraft against land or sea targets over very long ranges.
- The capability of striking the targets located at around 350 kilometres compared to around 290 kilometres for the initial version.
- The first test of the initial version of the Brahmos Air Launched Cruise Missile was conducted in 2017.

What are Brahmos missiles?

- Brahmos is a joint venture between the Defence Research and Development Organisation of India and NPOM of Russia. It is named after the rivers Brahmaputra and Moskva.
- It is a two-stage, solid propellant engine in the first stage and a liquid ramjet in the second.
- It can be launched from land, air, and sea and multi a capability missile with pinpoint accuracy that works both day and night irrespective of the weather conditions.
- It operates on the "Fire and Forgets" principle it does not require further guidance after launch.
- These are called "standoff range weapons",e fired from a range far enough to allow the attacker to evade defensive counter-fire.
- Brahmos is one of the fastest cruise missiles currently operationally deployed with the speed of Mach 2.8, which is nearly 3 times more than the speed of sound.

Geoglyphs

Recently, experts and conservationists have raised concerns over the proposed location for a mega oil refinery in Barsu village of Ratnagiri district of Maharashtra.

About Geoglyphs:

- Barsu sites in the Konkan region were added to a tentative list of UNESCO's world heritage sites and protected by the state archaeology department and the Archaeological Survey of India (ASI).

What are geoglyphs?

- Geoglyphs are a form of prehistoric rock art, created on the surface of laterite plateaus.
- They are made by removing a part of the

rock surface through an incision, picking, carving or abrading.

- They can be in the form of rock paintings, etchings, cup marks and ring marks.

What is the significance of this prehistoric rock art?

- Clusters of geoglyphs are spread across the Konkan coastline in Maharashtra and Goa, spanning around 900 km. Porous laterite rock, which lends itself to such carving, is found on a large scale across the entire region.
- It has more than 1,500 pieces of such art, also called “Katal Shilpa,” spread across 70 sites.
- This is evidence of the continued existence of human settlements from the Mesolithic (middle Stone Age) to the early historic era.
- UNESCO’s tentative world heritage list mentions seven sites with petroglyphs in Ratnagiri district — Ukshi, Jambharun, Kasheli, Runde Tali, Devihsol, Barsu and Devache Gothane, one in Sindhudurg district –Kudopi village, and nine sites at Phansamal in Goa.
- The figures depicted in the geoglyphs include humans and animals such as deer, elephant, tiger, monkey, wild boar, rhinoceros, hippopotamus, cattle, pig, rabbit, and monkey.
- They also include a high number of reptilian and amphibian creatures such as tortoises and alligators, aquatic animals such as sharks and sting rays, and birds like peacocks.

Kala Azar Disease

Prime Minister recently said that India will completely eradicate Kala Azar disease soon.

What is Kala Azar Disease?

- Kala Azar or black fever is a disease caused by infection with Leishmania parasites. It is transmitted by female sandfly - Phlebotomus argentipes. It is also known as visceral leishmaniasis or black fever or Dum-Dum fever.

Types:

- Cutaneous leishmaniasis: This is another form of Kala-azar which results in skin lesions – mainly ulcers on the exposed parts of the body, which creates scars and serious disability. The lesions usually are painless but can be painful, particularly if open sores become infected with bacteria. Types of Cutaneous leishmaniasis:

- Mucosal Leishmaniasis: In this type of Cutaneous leishmaniasis, the infection results from the dissemination of parasites from the skin to the naso-oropharyngeal mucosa.

Symptoms

- Initially, leishmania parasites cause skin sores or ulcers at the site of the bite. If the disease progresses, it attacks the immune system.
- Kala azar presents after two to eight months with more generalized symptoms including prolonged fever and weakness.
- Treatment: Treatment of Kala Azar is done through liposomal AmB – this is the drug of choice for immunocompetent patients. There are other treatment options available such as paromomycin, miltefosin and multidrug therapy treatment.

What is Bomb Cyclone?

- Bomb cyclone continues to batter US as death toll mounts to 34.

What is Bomb Cyclone?

- A bomb cyclone is a mid-latitude storm in which the central pressure drops fast at one millibar per hour for at least 24 hours. However, the millibar readings can change based on where the storm is forming.
- This quickly increases the pressure difference, or gradient, between the two air masses, making the winds stronger. This process of rapid intensification has a name: bombogenesis.
- As the winds blow, the rotation of the Earth creates a cyclonic effect. The direction is counterclockwise in the Northern Hemisphere (when viewed from above).
- Formation:
- A bomb cyclone is formed when the air of different air masses (cold, dry) comes together.
- As the warm air rises, it creates a cloud system lowering air pressure and forming into a storm circulating counterclockwise around the low-pressure area.

Characteristics:

- The bomb cyclone will be characterised by cold winds, which are also expected to pick up, and wind chill temperatures could drop to dangerous lows far below zero — enough to cause frostbite within minutes.
- The dangerous storm is expected to hit everyone east of the Rockies — around two-thirds of the country.

Avian Flu

As many as 7,000 birds are being culled in Kerala's Kottayam district following an outbreak of bird flu that has now spread to more parts of the district.

What is Avian influenza?

- Avian influenza or bird flu is a highly contagious viral disease caused by Influenza Type A viruses which generally affects poultry birds such as chickens and turkeys.
- There are many strains of the virus – some of them are mild and may merely cause a low egg production or other mild symptoms among chickens, while others are severe and lethal.
- Wild aquatic birds such as ducks and geese are the natural reservoir of Influenza A viruses and the central players in the ecology of these viruses.

History of bird flu among humans:

- It was in 1997 when humans are first known to have contracted bird flu following an outbreak in a live bird market of Hong Kong. It was the H5N1 strain of the virus.
- Subsequently, several other strains of the virus such as H5N2 and H9N2 spread from animals to humans, thus becoming a global public health concern.

Does it spread easily to humans?

- No, it does not. Generally, people coming in close contact with infected alive or dead birds have contracted the H5N1 bird flu, and it does not usually spread from person to person.
- There is also no evidence, that the disease can be spread to people through properly prepared and cooked poultry food.
- The virus is sensitive to heat, and dies in cooking temperatures

Streptococcus (strep A)

Recently, an unseasonal rise in group A Streptococcus has killed many children in the United Kingdom.

What is Streptococcus (strep A)?

- Group A Streptococcus (GAS), also known as Strep A, are bacteria commonly found on the skin or in the throat.
- Occasionally, this can lead to a condition called scarlet fever, which typically affects young schoolchildren and is characterized by a sore throat, high fever and rough skin rash.
- Even it can cause severe diseases such as sepsis, streptococcal toxic shock syndrome and necrotizing fasciitis.

- According to British Health Security Agency (UKHSA), in children under 10 years, the rate of GAS infection is higher than levels reported in the years preceding the COVID-19 pandemic but substantially higher than in the past two years, according to UKHSA.

Gallium Nitride (GaN) Nanostructures

Researchers in Bengaluru's Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), an autonomous institute, have recently shown infrared light emission and absorption with GaN nanostructures.

About Gallium Nitride (GaN) Nanostructures:

- Blue light emission from GaN has been known for some time, and it is used in LEDs, this is the first time that infrared light-matter interactions are demonstrated in GaN.
- For this demonstration, they have utilized a scientific phenomenon called surface polariton excitations.

What is surface polariton?

- These are special modes of electromagnetic waves travelling at the interface of a conductor and an insulator such as air.
- These are quasi-particles which have both light and matter characteristics.
- By altering the morphology and shape of the nanostructures, they are also able to excite plasmon polaritons in GaN, which results in extending the light-matter coupling to further reaches of the electromagnetic spectrum.

What is GaN?

- It is a very hard and mechanically stable wide band gap (WBG) semiconductor, as it has a hexagonal crystal structure.
- The critical factors of gallium nitride: Its reliability, compact size, high efficiency, fast switching speed, low on-resistance, and high thermal conductivity.

Applications of the GaN nanostructure

- It can be helpful in highly efficient infrared absorbers, emitters, and modulators that are useful in defence technologies, energy technologies, imaging, sensing.

Lecanemab drug

The drug, lecanemab was recently tested on patients with early Alzheimer.

About:

- Lecanemab, is jointly developed by pharma companies Biogen and Eisai.
- Lecanemab belongs to a class of drugs called monoclonal antibodies. These antibody-mediated drugs target beta amyloid, the protein deposition that is seen in patients with Alzheimer's disease, and disrupts cells function.

Alzheimer's disease



- It is a progressive neurologic disorder that causes the brain to shrink (atrophy) and brain cells to die. It involves parts of the brain that control thought, memory, and language.
- It can seriously affect a person's ability to carry out daily activities.

India's scenario:

- In India, only 1 in 10 people with dementia receive any diagnosis, treatment or care for the disease, according to the World Alzheimer's Report, 2021.
-

SpaceTech Innovation Network (SpIN)

ISRO inks MoU with Social Alpha to establish SpaceTech Innovation Network.

About:

- SpIN is India's first dedicated platform for innovation, curation, and venture development for the burgeoning space entrepreneurial ecosystem.
- The tie-up is a one-of-a-kind public-private collaboration for start-ups and SMEs in the space industry.
- SpIN will primarily focus on facilitating space tech entrepreneurs in three distinct innovation categories:
- Geospatial Technologies and Downstream Applications;
- Enabling Technologies for Space & Mobility;

- Aerospace Materials, Sensors, and Avionics.

Social Alpha

- Social Alpha is a multistage innovation curation and venture development platform for science and technology start-ups that address the most critical social, economic, and environmental challenges through the power of entrepreneurship and market-creating innovations.
- Since its inception in 2016, Social Alpha has supported more 200 start-ups including 60+ seed investments.

Natovenator polydontus

Natovenator polydontus's well-preserved remains – a skeleton about 70% complete – were recently unearthed in the Gobi Desert

About:

- The dinosaur, called Natovenator polydontus, lived about 72 million years ago during the Cretaceous Period and was built like a diving bird with a streamlined body while possessing a goose-like elongated neck and a long flattened snout with a mouth bearing more than 100 small teeth. It was almost covered in feathers.
- While it was a cousin of speedy little predator Velociraptor, Natovenator was adapted to a semi-aquatic lifestyle in a freshwater ecosystem, perhaps floating on rivers and lakes, paddling with its front limbs, and using its flexible neck to catch fish and insects or diving underwater to capture its prey.
- Natovenator is part of the dinosaur group called theropods – sharing traits including bipedalism – best known for large meat-eaters including Tyrannosaurus, Tarbosaurus and Giganotosaurus.
- But the theropods, many of which were feathered, branched out in unusual directions with examples such as long-clawed ground sloth-like Therizinosaurus, ostrich-like Struthiomimus, termite-eating Mononykus and the entire bird lineage.

NITI Aayog Releases Study Report on 'Carbon Capture to Achieve Net Zero Emission Target by 2070

- A study report, titled 'Carbon Capture, Utilisation, and Storage Policy Framework and its Deployment Mechanism in India', was released.

- The report explores the importance of Carbon Capture, Utilisation, and Storage as an emission reduction strategy to achieve deep decarbonization from the hard-to-abate sectors.
- The report outlines broad level policy interventions needed across various sectors for its application



- Mumbai ranks 22nd in Global Prime Cities Index by Knight Frank.
- Mumbai stood at 22nd rank in a global index that measures annual price appreciation of premium residential properties, according to Knight Frank.
- In its report on 'Prime Global Cities Index Q3 (July-September) 2022', Property consultant Knight Frank said that all three Indian cities: Mumbai, Bengaluru and New Delhi, registered an increase in average annual prices in the third quarter of 2022

ISRO will develop "Spatial Data Infrastructure geoportal 'Geo-Ladakh' for Ladakh

- Ladakh has approached the Indian Institute of Remote Sensing (IIRS), a unit of Indian Space Research Organisation (ISRO) for developing "Spatial Data Infrastructure geoportal 'Geo-Ladakh' for UT-Ladakh".
- This portal will be used to find, access, distribute & contribute geospatial information and its associated geographic services such as navigation, buffer, measurements analysis, metadata catalogue, map catalogue and more.

India's Manned Space Flight Gaganyaan to be Launched in the Fourth Quarter of 2024

- The Government has said, the country's maiden human space flight mission, Gaganyaan, is targeted to be launched in the fourth quarter of 2024.
- Science & Technology Minister, Dr. Jitendra Singh said, in view of the paramount

importance of crew safety, two uncrewed flights are scheduled, before the final human space flight- 'H1 mission', to demonstrate the performance of the crew escape system and parachute-based deceleration system for different flight conditions

Aim:

- Gaganyaan is an Indian crewed orbital spacecraft that is intended to send 3 astronauts to space for a minimum of seven days by 2022 (delayed due to COVID-19).

Launched by:

- ISRO's Geosynchronous Satellite Launch Vehicle GSLV Mk III (3 stages heavy-lift vehicle).

NASA Launches International Mission 'SWOT' to Survey Earth's Water

- The US National Aeronautics and Space Administration (NASA) and the French space agency Centre National d'Etudes Spatiales (CNES) have jointly launched the newest Surface Water and Ocean Topography (SWOT) spacecraft to track nearly all the water on the surface of the Earth.
- It was launched atop a SpaceX rocket from Space Launch Complex 4E at California's Vandenberg Space Force Base. It will remain operational for 3 years.

About SWOT mission: Key Highlights:

- The Surface Water and Ocean Topography (SWOT) mission is a satellite altimeter jointly developed and operated by NASA and CNES (French space agency) in partnership with the space agencies of the UK and Canada.
- The mission's objective is to make the world's first-ever global survey of the Earth's surface water, capable of observing the finer details of the ocean surface topography and measuring the changes in the terrestrial surface water bodies.
- As it uses wide-swath of altimetry technology, the mission will be capable of almost completely observing the world's oceans and freshwater bodies with repeated high-resolution elevation measurements.

What is Chandrayaan-3 Mission:

- The Chandrayaan-3 mission is a continuation of Chandrayaan-2, which was launched in July 2019 and had the goal of putting a rover on the lunar South Pole.
- The Vikram lander's subsequent failure prompted the development of a different

mission to show off the landing skills required for the 2024 lunar polar exploration mission that is being proposed in collaboration with Japan.

- It will have a landing module and an orbiter. But unlike Chandrayaan-2, this orbiter won't be equipped with a research payload.





Air Pollution

According to a report by the World Bank, curbing air pollution in India needs efforts across South Asia

About:

- According to the report, existing measures by the government can reduce particulate matter, significant reduction is possible only if the territories spanning the airsheds implement coordinated policies.
- Currently over 60% of South Asians are exposed to an average 35 g/m³ of PM_{2.5} annually.
- In some parts of the Indo-Gangetic Plain (IGP) it spiked to as much as 100 g/m³ – nearly 20 times the upper limit of 5 g/m³ recommended by the World Health Organisation.
- According to the report, India has six large airsheds, some of them shared with Pakistan, between which air pollutants move.

Mudumalai Tiger Reserve (MTR)

Almost two weeks since his capture and relocation to the Mudumalai Tiger Reserve (MTR), the elephant, PM2, is acclimatising to his new habitat and has exhibited key behavioural changes.

Where is the Mudumalai Tiger Reserve located?

- It is located in the Nilgiris District of Tamil Nadu.
- It is at the tri-junction of three states, viz, Karnataka, Kerala and Tamil Nadu and it plays a unique role by forming part of the Nilgiris Biosphere Reserve.
- Nilgiris Biosphere Reserve is the first Biosphere Reserve in India, declared during 1986.
- It has a common boundary with Wyanad Wildlife Sanctuary (Kerala) on the West, Bandipur Tiger Reserve (Karnataka) on the North, and the Nilgiris North Division on the South and East and Gudalur Forest Division on the South West, together forming a large conservation landscape for flagship species such as Tiger and Asian Elephant.
- The name Mudumalai means ” the ancient hill range”. Indeed, it is as old as 65 million years when Western Ghats were formed.

What are the important Flora And Fauna Present?

- The Reserve has tall grasses, commonly referred to as “Elephant Grass”, Bamboo of the giant variety, valuable timber species like Teak, Rosewood, etc.
- There are several species of endemic flora. Such a varied habitat is inhabited by a variety of animals which include Tiger, Elephant, Indian Gaur, Panther, Sambar, Spotted Deer, Barking Deer, Mouse Deer, Common Langur, Malabar Giant Squirrel, Wild Dog, Mongoose, Jungle Cat, Hyena, among others.

Asian Giant Tortoise

Ten captive-bred Asian Giant Tortoise (*Manouria emys*) juveniles were released into a protected area of Nagaland’s Intanki National Park.

About:

- The soft release of Asian Giant Tortoise is an attempt to boost conservation and repopulating the species. The soft release is a process of gradually releasing captive-raised species into the wild.
- Distribution: They are found in Bangladesh, India, Indonesia, and Malaysia and other places.
- Diet: Bamboo shoots, tubers and other juicy vegetation and some invertebrates and frogs.
- Threats: Hunting for consumption, habitat loss, anthropogenic activities like construction and slash and burn.

Conservation Status

- IUCN :Critically Endangered
- CITES :Appendix II
- Indian Wildlife (Protection) Act of 1972 : Schedule IV

Intanki National Park:

- It is also known as the Ntangka National Park, which was established by British administrators in the year 1923.
- Flora: it has thick rain forests which creates natural habitat for many animals.
- Fauna: Wild buffaloes, Hoolok gibbo ,Tigers, Sloth bear, Wild dogs and flying squirrels.

Frozen coral

- Scientist recently freeze Great Barrier Reef coral in world –first trial.

About:

- Scientists used the cryomesh to freeze coral larvae at the Australian Institute of Marine Sciences (AIMS).
- The Great Barrier reef coral has suffered four bleaching events in the last seven years including the first ever bleach during a La Nina phenomenon

What is Cryomesh?

- Cryomesh is a specially fabricated mesh used as substrate in cryopreservation. This is lightweight and can be manufactured cheaply. It better preserves coral and has the properties of cryoplates.
- The mesh technology will help store coral larvae at -196°C (-320.8°F).

Significance of Coral Cryopreservation –

- Cryogenically frozen coral can be stored and later reintroduced to the wild. This could eventually help to rewild reefs threatened by climate change.
- It can build a bigger, more diverse bank of frozen living corals, preserving biodiversity.

What are corals?

- Corals are animals which live in a symbiotic relationship with microscopic algae called zooxanthellae (which live within the coral tissue).
- The zooxanthellae convert sunlight into food, providing corals with up to 90 per cent of their energy needs. They also give corals much of their colour.

Tal Chhapar Sanctuary

Recently, the Tal Chhapar blackbuck sanctuary in Churu district of Rajasthan has received a protective cover.

About:

- The Tal Chhapar Sanctuary is known as the home of blackbuck and a variety of birds in Rajasthan.
- The sanctuary is flanked by the Great India Desert, Thar and boasts a unique ecosystem and is an important birdwatching destination in India.
- Migratory birds in the sanctuary: Harriers, eastern imperial eagles, tawny eagle, short-toed eagle, sparrow, and little green bee-eaters, black ibis and demoiselle cranes, whereas skylarks, crested larks, ring doves, and brown doves are seen round the year.

- Fauna: Desert fox and desert cat can be spotted in the sanctuary.

Raktsey Karpo Apricots

- Recently, Ladakh got its first ever Geographical Indication Tag to Raktsey Karpo Apricot

About:

- Ladakh grows more than thirty types of Apricots, but the Raktsey Karpo variety is unique to the region.
- Apricot is the major fruit of Ladakh with large-scale cultivation in both Leh and Kargil Districts among the nine fruits grown in Ladakh.
- Apricot is also being promoted under One District One Product for Kargil.

What is Geographical Indication Tag?

- A Geographical Indication is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- Geographical indications are typically used for agricultural products, foodstuffs, wine and spirit drinks, handicrafts and industrial products.
- The Geographical Indications of Goods (Registration and Protection) Act, 1999 seeks to provide for the registration and better protection of geographical indications relating to goods in India.
- This GI tag is valid for a period of 10 years following which it can be renewed.



Bullock's Heart Tree

- A Research intern at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) recently won the prize for developing a cost-effective bio-insecticide from the leaves of bullock's heart tree (*Annona reticulata*), popularly known as Ramphal.

About Bullock's Heart Tree:

- Bullock heart tree's extracts have traditionally been used to cure conditions

including dysentery and pediculosis (louse infestation)

- Extracts from its leaves may be useful against three destructive pests — Pod borer, Green peach aphid and fall armyworm — with a mortality rate of 78-88 per cent, the research claimed. All these pests are known for incurring crop losses to farmers.
- It is a small deciduous or semi-evergreen tree in the plant family Annonaceae and part of the Annonas group.
- It is best known for its fruit, called custard apple, a common name shared with fruits of several other species in the same genus: A. cherimola and A. squamosa.

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

- ICRISAT is a non-profit agricultural research organization.
- It was founded in 1972 by a consortium of organizations convened by the Ford and the Rockefeller Foundations.
- Its charter was signed by the Food and Agriculture Organization (FAO) and United Nations Development Programme (UNDP).

Invasive mussel species

- Fishermen of Pulicat and Ennore are raised concerns over the spread of an invasive species of mussel that is a threat to the prawns of both waterbodies.



About:

- The marine biologists identified these species as *Mytella strigata* or Charru mussels which are Native to South America.
- These mussels have invaded tidal wetlands in several parts of the world, including Vembanad in Kerala. This is spreading due to the discharge of ballast waters from ships visiting the ports of Kattupalli.
- After Cyclone Vardah in December 2016, the mussels began to intensify and spread far north towards the Pulicat waters.

- Human interference in the wetlands, pollution and nature's actions have triggered the rapid spread of the species.
- Threats: These mussels spread like a carpet over the river bottoms and thus preventing prawns from grazing or burying themselves in the sediment.
- Its spread is wiping out the locally prevalent yellow clams and green mussels.

Tal Chhapar Sanctuary

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About:



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- The sanctuary is flanked by the Great India Desert, Thar and boasts a unique ecosystem and is an important birdwatching destination in India.
- Migratory birds in the sanctuary: Harriers, eastern imperial eagles, tawny eagle, short-toed eagle, sparrow, and little green bee-eaters, black ibis and demoiselle cranes, whereas skylarks, crested larks, ring doves, and brown doves are seen round the year.
- Fauna: Desert fox and desert cat can be spotted in the sanctuary.

Heat-Resistant Variety of Wheat

The wheat varieties DBW187 and DBW222 have been found superior over HD-3086 as far as heat tolerance is concerned.

About:

- During the crop season 2021-22, the varieties namely DBW187 and DBW222 have shown heat tolerance with yield gain of 3.6% and 5.4%, respectively as compared to HD-3086.
- The Government aims to promote the use of heat-resistant varieties amongst the farmers through public and private partnership and providing seed directly to the farmers.
- To promote the use of these varieties,

the Indian Institute of Wheat and Barely Research (IIWBR), Karnal under ICAR has signed 250 Memorandum of Agreements (MoAs) for DBW 187 and 191 MoAs for DBW 222 with private companies for seed production.

- The ICAR-IIWBR Karnal has initiated a specific research project entitled “Breeding high yielding wheat genotypes for stress conditions of warmer regions of India” on heat tolerant varieties.
- Besides, ICAR-IIWBR Karnal is also collaborating with International Maize and Wheat Improvement Centre (CIMMYT), Mexico on development of climate resilient wheat varieties.



Orcas

Two cities in United States’ state of Washington have taken steps to formally declare their support for legal rights for a group of endangered orcas. City of Port Townsend and City of Gig Harbor in the Pacific Northwest have signed proclamations to secure the inherent rights of the Southern Resident Orcas

About Orcas:

- Orcas are found across the world and are also known as “killer whales”.
- It is the largest member of the Delphinidae family, or dolphins.
- Members of this family include all dolphin species, as well as other larger species, such as long-finned pilot whales and short-finned pilot whales, whose common names also contain “whale” instead of “dolphin”.
- Killer whales are highly social, and most live in social groups called pods (groups of maternally related individuals seen together more than half the time).
- Killer whales rely on underwater sound to feed, communicate, and navigate.

Southern Resident killer whales:

- Southern Resident killer whales are the only endangered population of killer whales in the United States.
- Despite federal legal protections for nearly two decades, the population of the

orcas continues to decline and is critically endangered.

- Only 73 Southern Resident Orcas now exist in the wild.

Rare Earth Minerals

Union Minister of State (Independent Charge) Science & Technology recently said that India is not reliant on China for accessing rare earth minerals.

About Rare Earth Minerals:

- Rare Earth Elements or Rare Earth Metals are a set of 17 elements in the periodic table — the 15 lanthanides, plus scandium and yttrium, which tend to occur in the same ore deposits as the lanthanides, and have similar chemical properties.
- They used in production in a huge number of sectors, including renewable energy technology, oil refinery, electronics, and the glass industry.
- Rare Earth elements are used in space shuttle components, jet engine turbines, and drones.
- Cerium, the most abundant Rare Earth element, is essential to NASA’s Space Shuttle Programme.
- Although called “rare”, they are actually found relatively abundantly in the Earth’s crust.
- However, they are hazardous to extract, and there are relatively few places in the world that mine or produce them.
- According to the Rare Earth Technology Alliance (RETA), the estimated size of the Rare Earth sector is between \$10 billion and \$15 billion. About 100,000-110,000 tonnes of Rare Earth elements are produced annually around the world.

Greybellied Wren Babbler

According to the recent findings of birdwatchers published by Indian BIRDS, a peer-reviewed journal of South Asian ornithology, they recorded a rare and elusive greybellied wren babbler.

About

- Grey bellied wren babbler is a specie of songbird named after the Lisu, the local community.
- This is mostly found in Myanmar with some birds occurring in adjoining China and Thailand.
- IUCN Status: Least Concern
- Habitat: Subtropical moist montane forest.
- Features:
- Dark edges to its back and crown feathers

give it a scaly-looking quality.

- Forages on ground and in undergrowth, almost always under heavy cover and rarely emerging into the open.

Himalayan Medicinal Plants

Three medicinal plant species found in the Himalayas have made it to IUCN Red List of Threatened Species following a recent assessment.

About:

- *Meizotropis pellita* has been assessed as 'critically endangered', *Fritillaria cirrhosa* as 'vulnerable', and *Dactylorhiza hatagirea* as 'endangered'.

Meizotropis pellita:

- *Meizotropis pellita*, commonly known as Patwa, is a perennial shrub with restricted distribution that is endemic to Uttarakhand.
- "The species is listed as 'critically endangered' based on its limited area of occupancy (less than 10 sq. km)," the study stated.
- The species is threatened by deforestation, habitat fragmentation and forest fires.
- The essential oil extracted from the leaves possesses strong antioxidants and can be a promising natural substitute for synthetic antioxidants in pharmaceutical industries.

Fritillaria cirrhosa:

- *Fritillaria cirrhosa* (Himalayan fritillary) is a perennial bulbous herb.
- According to the study, a decline of at least 30% of its population over the assessment period (22 to 26 years).
- Considering the rate of decline, long generation length, poor germination potential, high trade value, extensive harvesting pressure and illegal trade, the species is listed as 'vulnerable'.
- In China, the species is used for the treatment of bronchial disorders and pneumonia.
- The plant is also a strong cough suppressant.

Dactylorhiza hatagirea:

- The third listed species, *Dactylorhiza hatagirea* (Salampanja), is threatened by habitat loss, livestock grazing, deforestation, and climate change.
- It is extensively used in Ayurveda, Siddha, Unani and other alternative systems of medicine to cure dysentery, gastritis, chronic fever, cough and stomach aches.

Koundinya Wildlife Sanctuary

- An 18-member herd of all female elephants from the forests of Gudiyattam and Pernambattu of Tamil Nadu are currently on the prowl in the Koundinya wildlife sanctuary zone in Chittoor district, apparently "in search of mates".

About:

- It is located in Palamner - Kuppam forest ranges of Chittoor district of Andhra Pradesh.
- This Sanctuary comes under Project elephant - a Country wide Elephant Conservation Project taken up by Government of India.
- The only home for Asiatic elephants in the State of Andhra Pradesh.
- Flora
- Plants like *Albizia amara*, *Ficus glomerata*, *Zizyphus xylocarpus*, *Gymnosporia Montana*, etc.
- Fauna
- Reptiles like Common cobra, Rat snake, Indian rock python, Forest calotes, Skinks, etc.
- Birds like Partidges, quails, storks, Cotton teal, etc.
- Mammals like Indian Elephant, Panther, Sloth bear, Wild boar, Chowsingha, Nilgai, Hyena, Jackal, etc.



REPORTS AND INDICES

Integrated Road Accident Database (iRAD) system

Recently, the Ministry of Road Transport & Highways (MoRTH) released the Annual report 'Road accidents in India 2021'

About:

- As per the report, there were 4,12,432 unfortunate incidences of road accidents during 2021 which claimed 1, 53,972 lives and caused injuries to 3, 84,448 persons.
- This report has been developed by reporting, management, claim processing and analysis of road accident data by using the Integrated Road Accident Database (iRAD) system.

What is iRAD?

- It is an initiative of the Ministry of Road Transport and Highways (MoRTH) and is funded by World Bank, to improve road safety in the country.
- This will facilitate road accident data collection by 4 stakeholder departments; Police, Transport, Highways and Health Departments.
- Through a collection of road accident data from all over the country, a road accident database will be developed. The collected data will be analysed using different data analytics techniques for the identification of accident-prone areas and the causes of the accidents.
- The analysis output will be represented in appropriate dashboards, access to higher authorities of stakeholder departments and MoRTH. And accordingly, a strategy will be formed for the reduction of the number of road accidents in India and to enhance road safety.

City Finance Rankings, 2022

Recently, the Ministry of Housing & Urban Affairs launched this City Finance Rankings, 2022 to evaluate, recognize and reward India's Urban Local Bodies.

About:

- The rankings aim to motivate city/state officials and decision-makers, to implement municipal finance reforms.
- The participating ULBs will be evaluated on 15 indicators across three key municipal

finance assessment parameters, namely:

- Resource Mobilization
- Expenditure Performance
- Fiscal Governance.
- The cities will be ranked at the national level based on their scores under any one of the following four population categories:
 - Above 4 million
 - Between 1-4 million
 - 100K to 1 million
 - Less than 100,000
- The top 3 cities in each population category will be recognized and rewarded at the national level as well as within each state/state cluster.

Social Progress Index (SPI)

Economic Advisory Council to Prime Minister (EAC-PM) will release the Social Progress Index (SPI) for states and districts of India on December 20, 2022.

About Social Progress Index (SPI):

- SPI is a comprehensive tool intended to be a holistic measure of the Social Progress made by the country at the national and sub-national levels.
- The report has been prepared by Institute for Competitiveness, headed by Dr Amit Kapoor and the Social Progress Imperative, headed by Michael Green.
- It was mandated by Economic Advisory Council to the Prime Minister of India.

What is the objective of the SPI?

- The report aims to provide a systematic account of the social progress made at all levels in the country with state and district-wise rankings and scorecards.
- The report also sheds light on the achievements of the districts that have performed well on the index and the role of the states in achieving social progress.
- A special section of the report provides an analysis of the Aspirational Districts of India, leading to a broader understanding of the social progress at the grassroots level.
- The report will act as a critical enabler and tool for policymakers in the coming years for achieving sustained socio-economic growth.

India Development Report

The World Bank recently lifted its growth forecast for India's economy this year to 6.9%, after having downgraded it to 6.5% in October, 2022, citing resilience in economic activity despite a deteriorating external environment.

About:

- It was released by World Bank.
- India Development Report titled 'Navigating the Storm'.

Highlights:

- It revised the GDP forecast considering the strong upturn in the July to September quarter of 2022-23, when it grew 3% despite inflationary pressures and tighter financing conditions, "driven by strong private consumption and investment".
- The government's focus on bolstering capital expenditure also supported domestic demand in the first half of 2022-23.
- It expects the Indian economy to grow at a slightly slower 6.6% in 2023-24 as a challenging external environment and faltering global growth will affect its economic outlook through different channels.
- The report said that while a one percentage point decline in growth in the United States is associated with a 0.4 percentage point decline in India's growth, the effect is around 1.5 times larger for other emerging economies, and the result is similar for growth spillovers from the EU and China.

Social Hostilities Index (SHI)

- The Washington-based think tank Pew Research Centre has recently come out with a study that puts India at the top of its index of social hostilities involving religion in 2020 in the context of the impact of Covid restrictions.

About

- US think-tank Pew Research Center released the Social Hostilities Index (SHI).
- AT 9.4 out of a maximum possible score of 10, India's SHI in 2020 was worse than neighbouring Pakistan and Afghanistan, and a further increase in its own index value for 2019. A higher score is worse. The report covered 198 countries.
- The SHI measures acts of religious hostility by private individuals, organizations or groups. The index comprises 13 metrics, including religion-related armed conflict or terrorism and mob or sectarian violence.
- Questions used to compute the SHI

included whether the country saw violence motivated by religious hatred or bias, whether individuals faced harassment or intimidation motivated by religious hatred or bias and whether there was mob violence against those of particular religious groups.

- Among the most populous countries, India, Nigeria, Pakistan, Egypt and Bangladesh had "very high" social hostilities involving religion.



Global Water Resources Report 2021 Released by WMO

- WMO (World Meteorological Organization) has released its first annual State of Global Water Resources Report 2021. The aim of this annual report is to support monitoring and management of global freshwater resources in an era of growing demand and limited supplies

India ranked 48th in Global Aviation Safety Rankings 2022

- According to DGCA officials, India has jumped to the 48th position in the global aviation safety ranking by the International Civil Aviation Organization (ICAO).
- Four years ago, the country was ranked at the 102nd position.
- In the ranking, Singapore is at the top, followed by the UAE and South Korea at the second and third positions, respectively, the officials said. China is at the 49th place.

2022 Global Food Security Index (GFSI) Report

- The 2022 Global Food Security Index (GFSI) report was released by the British weekly The Economist. The 11th Global Food Security Index shows a deterioration in the global food environment for the third year, threatening food security. In this report, South Africa overtook Tunisia to become the most food-secure country in Africa



World Cup 2022

- Argentina won its third World Cup title by beating France 4-2 in a penalty shootout.

About:



- The Football World Cup is an international soccer tournament held every four years to determine the best national soccer team in the world.
- The first official World Cup was played in Uruguay 1930.
- The tournament is the first to be held in the Arab world and only the second to take place in Asia, after Japan and South Korea joint-hosted the event in 2002.
- This edition will be the last to feature just 32 teams, with the tournament being expanded from 2026 onwards in order to feature 48 nations.
- 2026 World cup edition will be hosted by 16 cities in three North American countries: Canada, Mexico and the United States.
- The winner of the FIFA World Cup 2022 will take home \$42 million, which is Rs 3.47 billion in prize money. The runner-up is likely to get \$30 million, which is Rs 2.48 billion.

NADA India to host Inclusion Conclave for the first time to focus on athletes with disabilities.

- National Anti-Doping Agency (NADA India) is hosts an Inclusion Conclave for the first time to sharpen the focus on anti-doping education and processes for athletes with disabilities.

Indian skipper Rohit Sharma becomes 6th-highest run scorer for India in ODIs

- Indian skipper Rohit Sharma has surpassed former batter Mohammed Azharuddin to become the sixth-highest run-getter for his

country in ODI cricket.

- The batter accomplished this record during India's first ODI against Bangladesh at Dhaka.
- With this, his ODI statistics stand at 234 matches, and 9,403 runs in 227 innings at an average of 48.46.
- He has scored 29 tons and 45 fifties in his ODI career, with the best individual score of 264, which is also the highest score ever in ODIs

Saikhom Mirabai Chanu Wins Silver at Weightlifting World Championship in Colombia

- Olympic silver medallist Mirabai Chanu won silver at the 2022 World Weightlifting Championships in Colombia.
- She beat the Tokyo 2020 champion Hou Zhihua of China. China's Jiang Huihua took home the gold medal with a combined weight of 206 kg.

Aditya Mittal Becomes India's 77th Chess Grandmaster

- Sixteen-year-old Aditya Mittal has become India's 77th chess Grandmaster during an ongoing tournament in Spain.
- The Mumbai player, who had secured three GM norms, crossed 2,500 ELO points mark during the sixth round of the ongoing Ellobregat Open tournament in Spain. He drew the game against Spain's No.1 Francisco Vallejo Pons to achieve the feat.

Indian batter Ishan Kishan hits fastest ODI double hundred off 126 balls

- India batter Ishan Kishan has smashed the fastest ODI double century in 126 balls against Bangladesh at the Zahur Ahmed Chowdhury Stadium in Chattogram.
- The wicketkeeper-batsman scored a 150 off boundaries alone, with 24 fours and 10 sixes all around the Zahur Ahmed Chowdhury Stadium. It took an excellent running catch to dislodge Kishan on 210 off 131

FINA World Swimming Championships 2022

- In Swimming, Indian swimmer Chahat Arora set a national record in the women's 100-metre breaststroke at the FINA World Swimming Championships 2022 in Melbourne, Australia.
- FINA is the International Swimming Federation. Chahat Arora completed the 100-metre breaststroke race in 1 minute, 13.13 seconds.

World Athletics: Neeraj Chopra becomes the most written-about athlete in 2022

- According to the World Athletics, Tokyo Olympics gold medalist javelin thrower Neeraj Chopra of India was the most written about track and field athlete in 2022, displacing the Jamaican legend Usain Bolt from the top lists.
- The data collated by media analysis company Unicepta was cited by World Athletics, the global governing body for athletics.

India hockey team win's Women's FIH Nations Cup 2022

- The Indian women Hockey team led by Captain Savita Punia beat Spain 1-0 in the final to win the inaugural FIH Nations Cup played at Valencia, Spain.
- The winning goal was scored by Gurjit Kaur of India. The inaugural FIH Nations cup was held in Valencia, Spain from 11-17 December 2022.
- India and Spain had played in the FIH women's Hockey Pro League 2021-22 season as replacement teams after pull-outs by Australia and New Zealand due to COVID-19 related issues.

Rafael Nadal and Iga Swiatek crowned ITF World Champions 2022

- Spanish Tennis Player, Rafael Nadal has been named the Men's International Tennis Federation (ITF) World Champion 2022 for the 5th time after an outstanding 2022 season.
- Previously, He has been named the men's ITF World Champion in 2008, 2010, 2017 and 2019.
- Polish tennis player, Iga Świątek, has been named Women's ITF World Champion

2022 for her performance in 2022 winning 2 Grand Slam titles and 8 titles.

FIFA World Cup 2022 Golden Boot,

- The Golden Boot, is awarded to the World Cup's top goal scorer, is presently tied for first place with five goals each between Lionel Messi and Kylian Mbappe, who will compete in the FIFA World Cup 2022 final game.
- A player who scores the most goals throughout the competition will receive the Golden Boot.

Haryana Women's Hockey U-18 team won Khelo India Youth Games 2022

- Hockey Haryana's women's team won the Khelo India Youth Games 2022 Women's Under 18 Qualifiers after defeating Madhya Pradesh (2-0) in the final at Bhubaneswar.
- In the final match, Pooja and Gurmail Kaur scored a goal each for Haryana to end the contest in their favour. Odisha stepped up to claim third place after beating Hockey Jharkhand 2-1 in the 3rd and 4th place encounter.
- Haryana, Madhya Pradesh, Odisha and Jharkhand have qualified for the Khelo India Youth Games (Women) to be held in Madhya Pradesh next year.

Koustav Chatterjee becomes India's 78th Grandmaster.

- Nineteen-year-old Kolkata-based chess player, Koustav Chatterjee became India's 78th Grandmaster.
- He is also the tenth GM from West Bengal. Koustav earned his first GM norm in October 2021 at a Grandmasters' chess tournament in Bangladesh.
- He got his second GM norm at the Asian championship in the first week of November 2022.
- He crossed FIDE rating 2500 in August. Koustav is in the joint-lead with GM Abhijeet Gupta at the National Senior Chess Championship with a score of 8/10 after 10 rounds
- About GrandMaster (GM):
- GrandMaster is the highest title apart from World Champion awarded to Chess players International Chess Federation FIDE. India's 1st Chess GrandMaster was won by Viswanathan Anand at the age of 14 in 1988

Birsa Munda Hockey Stadium

- Odisha Chief Minister Naveen Patnaik on Thursday inaugurated one of the largest hockey stadiums in India in Rourkela ahead of the Men's Hockey World Cup 2023.
- Built at an estimated cost of ₹261 crore, the stadium, located in Sundargarh district, has been christened as Birsa Munda Hockey Stadium Complex.
- It has been built in 50 acres in a record 15 months-time with a seating capacity of 20,000.
- The stadium also has practice centres adjacent to it with certified turfs and lighting. The State has also built a World Cup village, which has 225 rooms to house the players and officials, within nine months.

Belinda Clark becomes first women cricketer to have statue cast at Sydney Cricket Ground

- Australia's Belinda Clark has become the first female cricketer to have a statue cast in her honour, a bronze sculpture of the trailblazing former captain unveiled outside Sydney Cricket Ground.
- Clark played 15 tests and over 100 limited overs matches between 1991-2005, and became the first cricketer to score a double-hundred in one-day internationals when she made an unbeaten 229 against Denmark in 1997.

Pranesh M became India's 79th Grandmaster,

- Pranesh M became India's 79th Grandmaster, having completed his three norms prior to this event.
- IM Pranesh M emerged as the winner of the Rilton Cup, the first tournament of the FIDE Circuit.
- The 16-year-old from India, seeded 22nd, made a clean sweep of the field in Stockholm, winning eight games and finishing a full point ahead of IM Kaan Kucuksari (Sweden) and GM Nikita Meshkovs (Latvia)...



Pandit Madan Mohan Malaviya

The Prime Minister recently paid tribute to Pandit Madan Mohan Malaviya on his jayanti at a function at Parliament.



About Pandit Madan Mohan Malaviya:

- Pandit Madan Mohan Malaviya was born on December 25, 1861, in Allahabad, Uttar Pradesh. He is known for his contribution to India's education system and his role in the Indian Independence movement.
- Pandit Madan Mohan Malaviya was given the title of 'Mahamana' or great soul by Mahatma Gandhi, who considered him as an elder brother.
- In 2014, Pandit Malviya was posthumously conferred with Bharat Ratna, the country's highest civilian award.
- In 2016, the Indian Railways started the Varanasi-New Delhi Mahamana Express in the leader's honour.
- Major contributions:
- Banaras Hindu University: He played a key role in the Indian independence struggle against British rule and founded the Banaras Hindu University (BHU) in 1916. At the BHU, he served as Vice-Chancellor from 1919 to 1938.
- Hindu Mahasabha: Malaviya was one of the early leaders of the Hindu Mahasabha, and helped found it in 1906. He was a social reformer and a successful legislator, serving as a member of the Imperial Legislative Council for 11 years (1909–20).
- Scout and Guide: He was also one of the founders of Scout and Guide in India.
- 'Satyamev Jayate': One of the most famous

slogans, 'Satyamev Jayate' was said by Pandit Malviya in the session of 1918 when he was the President of the Indian National Congress.

- President of INC: Pandit Madan Mohan Malviya was the President of Indian National Congress for four sessions (1909, 1913, 1919 and 1932). Pandit Malviya played a big role in the Civil Disobedience and Non-cooperation movement which were led by Mahatma Gandhi.
- Role in media: He was the chairman of Hindustan Times from 1924 to 1946 and he also founded many Hindi and English newspapers, namely: The Leader, Hindustan Dainik, Maryada etc.
- Malaviya espoused free and compulsory primary education, opposed the system of indentured labour in the British Empire, and supported the nationalisation of railways.

Dr Rajendra Prasad

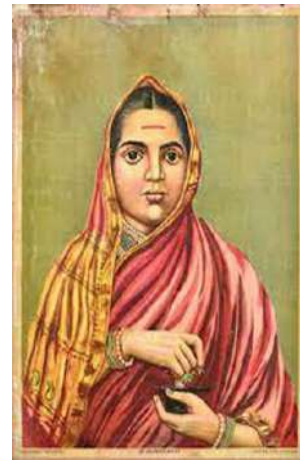
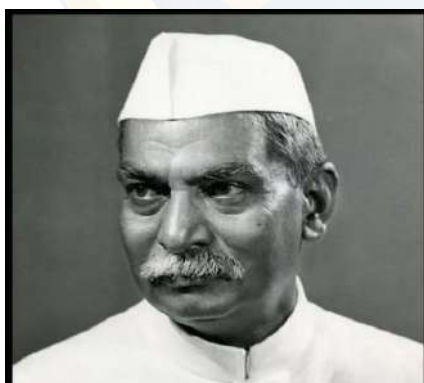
The President of India, Smt Droupadi Murmu, paid floral tributes to Dr Rajendra Prasad, the first President of India, on his birth anniversary (December 3, 2022) at Rashtrapati Bhavan

About:

- Rajendra Prasad was born in Bihar in 1884.
- His father was a scholar of Persian and Sanskrit language.
- A brilliant student, Rajendra Prasad stood first in the entrance examination to study at the University of Calcutta.
- He passed away in 1963.
- Career:
- After his post-graduation, he joined as a Professor of English at the Langat Singh College of Muzaffarpur, Bihar and later became its Principal.
- He started his law practice at the Calcutta High Court in 1911.
- He joined Patna High Court in 1916, after its establishment.
- He eventually emerged as a popular and eminent figure of the entire region.
- Role in Nationalist Movement:
- He attended as a volunteer in the 1906 Calcutta session of the Indian National Congress and formally joined the party in 1911.
- In 1917, Mahatma Gandhi undertook the

‘Champaran Satyagraha’ and Dr. Prasad offered his whole-hearted support to the cause.

- During the Non-Cooperation Movement in 1920, Dr Rajendra Prasad gave up his lucrative law practice and dedicated himself to the cause of freedom.
- He started the National College in Patna in 1921.
- He was elected as the President of the Bombay session of the Indian National Congress in October 1934.
- He was elected to the post again in 1939 and 1947.
- He became very much involved in the Quit India Movement launched by Gandhi in 1942.
- Rajendra Prasad was selected as the Food and Agriculture Minister in the interim Government headed by Jawaharlal Nehru in 1946.
- Soon he was elected President of the Constituent Assembly on December 11, the same year.
- Work in Independent India:
- On January 26, 1950, the Republic of India came into existence and Rajendra Prasad was elected to be the first ever President of the country.
- He travelled the world extensively as an ambassador of India, building diplomatic rapport with foreign nations.
- He was re-elected for 2 consecutive terms in 1952 and 1957, and remains only President of India to achieve this feat.
- In 1962, he was awarded the “Bharat Ratna”, India’s highest civilian award.



Ahilyabai Holkar

Maharashtra state government is planning to rename the city of Ahmednagar as ‘Punyashlok Ahilyadevi Nagar’, after the 18th century Malwa queen.

About:

- Who is Ahilyabai Holkar?
- Ahilyabai (1725 -1795) was one of the women rulers of Medieval India who belongs to the Holkar dynasty of the Maratha Empire.
- She was married Khanderao Holkar in 1733 at the tender age of 8. Her husband was killed in the battle of Kumbher in 1754.
- Ahilyabai is famous for having built numerous forts and roads in the Malwa region, sponsoring festivals and offering donations to many Hindu temples. Her philanthropy was reflected in the construction of several temples, ghats, wells, tanks and rest houses stretching across the length of the country.
- She welcomed stalwarts such as Marathi poet Moropant, Shahir Ananta Gandhi, and Sanskrit scholar Khushali Ram into her capital.
- John Keay, the British historian, gave the queen the title of ‘The Philosopher Queen’. She had been an acute observer of the wider political scene.

Mahakavi Subramanian Bharathiyar

Tamil Nadu Chief Minister recently inaugurated the statue of Mahakavi Subramanian Bharathiyar.

About:

- Mahakavi Subramanian Bharathiyar was a Tamil writer, poet, journalist, Indian independence activist, social reformer and polyglot.
- He was bestowed the title “Bharathi” for his excellence in poetry.

- Bharathiyar fought for the emancipation of women, against child marriage, vehemently opposed the caste system.
- Sister Nivedita inspired Bharathi to recognise the privileges of women and the emancipation of women exercised Bharathi's mind.
- Literary works:
- Bharathi joined as Assistant Editor of the Swadesamitran a Tamil daily in 1904.
- In 1907, he started editing the Tamil weekly India and the English newspaper Bala Bharatham with M.P.T. Acharya.
- He assisted Aurobindo in the Arya journal and later Karma Yogi in Pondicherry.
- Three of his greatest works namely, Kuyil Pattu, Panchali Sapatham and Kannan Pattu were composed during 1912
- He also translated Vedic hymns, Patanjali's Yoga Sutra and Bhagavat Gita to Tamil.

Sri Aurobindo Ghosh

Prime Minister Narendra Modi will participate in a programme commemorating Sri Aurobindo's 150th birth anniversary on December 13, 2022. During the Programme PM will release a commemorative coin and postal stamp in honour of Sri Aurobindo.

About Sri Aurobindo Ghosh:

- Early Life & Career:
- Born to surgeon Krishna Dhan Ghose and Swarnalata Devi in Calcutta on August 15, 1872.
- He passed Indian Civil Service Examination in 1890 but failed in the horsemanship test due to which he could not enter the service.
- In 1893, he accepted an appointment in the Baroda state service.
- He worked for 13 years and rose to the post of principal of the Baroda State College.
- Later, he left his job at Baroda to join the Bengal National College.

Panini

A grammatical problem that has defeated Sanskrit scholars since the 5th Century BC has finally been solved by Rishi Rajpopat, an Indian PhD student at the University of Cambridge



About Panini, the 'father of linguistics':

- Panini probably lived in the 4th century BC, the age of the conquests of Alexander and the founding of the Mauryan Empire, even though he has also been dated to the 6th century BC, the age of The Buddha and Mahavira.
- He likely lived in Salatura (Gandhara), which today would lie in north-west Pakistan, and was probably associated with the great university at Takshashila, which also produced Kautilya and Charaka, the ancient Indian masters of statecraft and medicine respectively.
- 'Ashtadhyayi', or 'Eight Chapters', an ancient text written by the scholar Panini towards the end of the 4th century BC.
- It is a linguistics text that set the standard for how Sanskrit was meant to be written and spoken.
- It delves deep into the language's phonetics, syntax and grammar, and also offers a 'language machine', where one can feed in the root and suffix of any Sanskrit word, and get grammatically correct words and sentences in return.
- Panini's grammar, which built on the work of many earlier grammarians, effectively stabilised the Sanskrit language.
- The Ashtadhyayi laid down more than 4,000 grammatical rules.
- Later Indian grammars such as the Mahabhasya of Patanjali (2nd century BC) and the Kasika Vritti of Jayaditya and Vamana (7th century AD), were mostly commentaries on Panini.

Jupiter Icy Moons Explorer

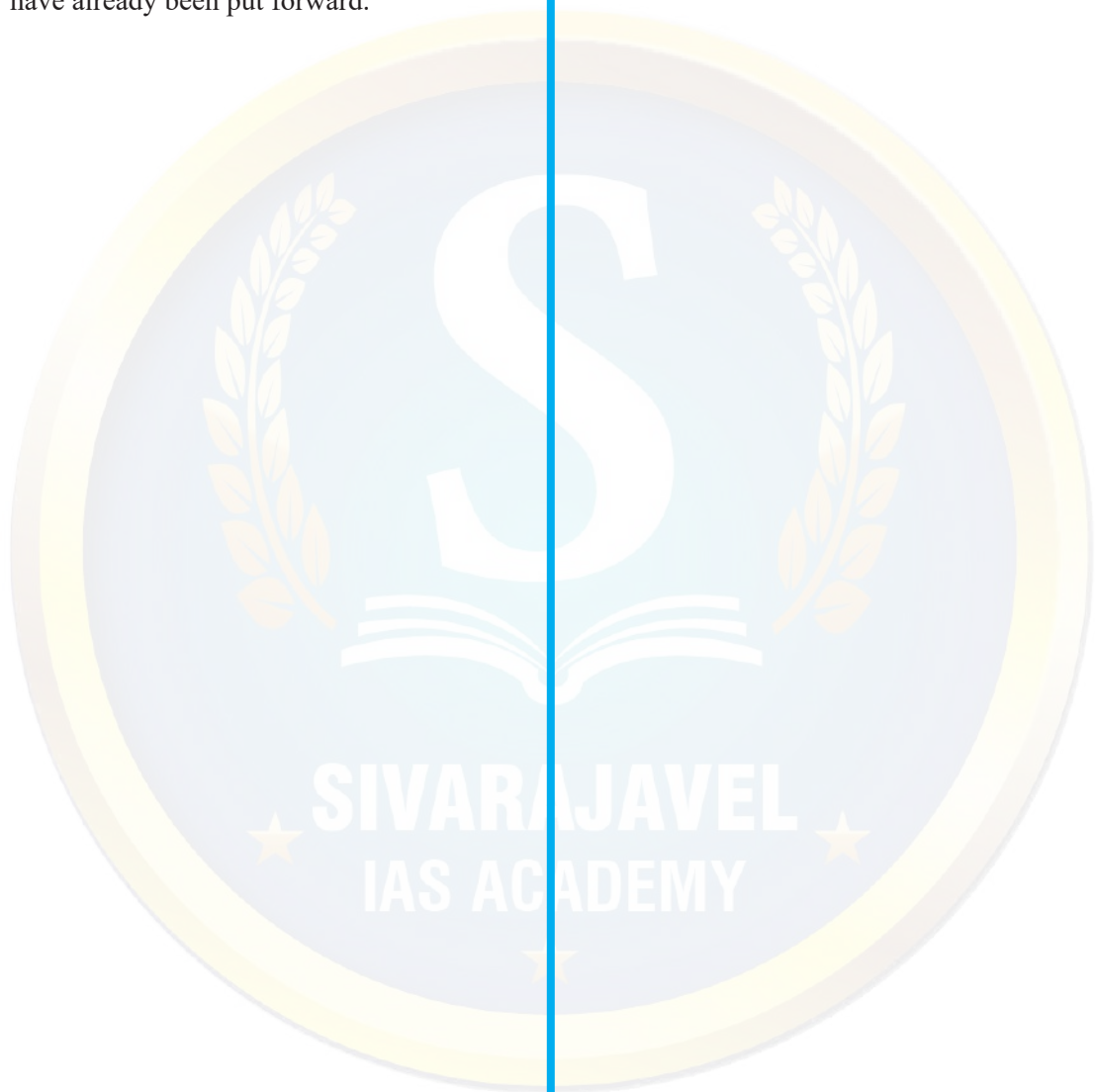
The European Space Agency has announced that the Jupiter Icy Moons Explorer (Juice) mission will be celebrated at an event in Toulouse, France, on 20 January next year.

About:

- Jupiter Icy Moons Explorer (Juice) will be Europe's first dedicated robotic mission to Jupiter. Juice is due to reach the planet in July 2031 after performing an incredible flight path through the Solar System.
- The mission will enter into orbit around Jupiter and perform numerous flybys of its large icy moons: Europa, Ganymede and Callisto.
- After four years of moon flybys, Juice will then enter into orbit around Ganymede, the largest moon in the Solar System — becoming the first spacecraft ever to reach orbit around the moon of another planet.
- The icy moons of Jupiter are interesting

as they are all believed to host oceans of liquid water beneath their frozen surfaces. Europa, in particular, is regarded as one of the most likely abodes in the Solar System for extra-terrestrial life.

- Juice will be equipped with ten scientific instruments including ice-penetrating radar to study the internal oceans. This use of radar is a practical first step in mapping the sub-surface oceans, paving the way for more exotic future missions involving submersible vehicles — some of which have already been put forward.





AWARDS

Digital India Awards 2022

- The Smart Cities Mission recently won the Platinum Icon in the Digital India Awards 2022 for their initiative “Data Smart Cities: Empowering Cities through Data”.

About Digital India Awards 2022:

- The Smart Cities Mission won the award under the ‘Data Sharing and Use for Socio-Economic Development’ category.
- This category ‘emphasizes on sharing of Government Data by Ministries/ Departments/Organizations, States, Cities and ULBs to create a vibrant data for analysis, decision-making, innovation etc.
- The initiative is a key step in creating a robust data ecosystem that enables evidence-based decision-making in cities.
- The Digital India Awards (DIA) is a prestigious National competition that seeks to encourage and honour innovative digital solutions by government entities in realising the Digital India vision.
- These are conducted by the National Informatics Centre (NIC) under the Ministry of Electronics & Information Technology (MeitY).

What is the Data smart Cities Initiative?

- Aim: To harness the power of data for better governance in India’s 100 Smart Cities.
- It is based on a ‘People, Platform, Process’ strategy, which is helping in the convergence of the Ministry of Housing & Urban Affairs’ efforts for performance management, empowerment of communities, and research, co-creation & open innovation.
- The program has institutionalized a Data Ecosystem in cities through 100 City Data Offices and more than 50 Data Policies.

South Korea’s Mina Sue Choi Crowned Miss Earth 2022

- South Korea’s Mina Sue Choi was crowned Miss Earth 2022 during the pageant’s coronation night on November 29 at Cove Manila, Okada Hotel, Parañaque City. There were 86 Eco-warriors, and only three queens were awarded the pageant’s three elements titles.

NIF Prize 2022

- A book on the popular forest conservation campaign Chipko Movement, written by historian-activist Shekhar Pathak, was named the winner of the Kamaladevi Chattopadhyay NIF Book Prize 2022.
- Translated from Hindi by Manisha Chaudhry, “The Chipko Movement: A People’s History” was selected from a diverse shortlist of five books covering a wide expanse of modern Indian history and encompassing distinct topics and perspectives

Filmmaker SS Rajamouli won Best Director

- Filmmaker SS Rajamouli won the Best Director Award for RRR at the New York Film Critics Circle 2022. The group is one of the first critics’ groups to weigh in on the awards season.
- Rajamouli’s win surprised many as his competitors included Steven Spielberg, Darron Aronofsky, Sarah Polley, and Gina Prince-Blythewood. A pre-Independence fictional story, “RRR” stars Ram Charan and Jr NTR as real-life Indian revolutionaries in the 1920s Alluri Sitarama Raju and Komaram Bheem, respectively

Earthshot Prize 2022

- India’s Greenhouse-in-a-box was among the five winners announced by the Prince of Wales, Prince William, in Boston, United States. It is a sustainable solution for small-scale farmers developed by an Indian startup, Kheyti, in Telangana which has won one million pounds (\$1.2 million).

Canara Bank won Banker’s Bank of the Year Award

- Canara Bank won the ‘Banker’s Bank of the Year Award 2022’ for India segment at the Global Banking Summit held in London.
- Bank Managing Director and Chief Executive Officer LV Prabhakar received the award from the organisers.

- These are prestigious awards to the banking industry and Canara Bank has been adjudged as the Best Bank in India for 2022. It expressed gratitude to its customers, investors, staff and other stakeholders.
- The Bankers' Bank of the year awards are considered to be like Oscar awards for the banking sector and the winners are judged on their ability to deliver returns, strategy, innovation, technology and product and services in their respective geographies in the last 12 months.

Swayam Shikshan Prayog Has Been Awarded The Local Adaptation Champions Awards

- Swayam Shikshan Prayog (SSP), Maharashtra-based organisation has been awarded the Local Adaptation Champions Awards, organised by the Global Center on Adaptation (GCA) at the ongoing COP27 in Sharm El-Sheikh, Egypt.
- It won the award in the 'Capacity and Knowledge' category for the work in supporting women farmers to adopt more resilient and sustainable agricultural practices in Marathwada, Maharashtra, where a focus on water-intensive cash crops currently leaves farmers exposed to climate shocks such as poor and uncertain monsoon seasons.

SS Rajamouli "RRR" bags two Golden Globe Award nominations

- SS Rajamouli-directed period movie 'RRR' has been nominated in two categories at the Golden Globe Awards to be held in January 2023. The Hollywood Foreign Press Association (HFPA) has nominated 'RRR' in the Best Picture: Non-English language and Best Original Song Naatu Naatu.

Jaipur Pink Panthers won 9th Pro Kabaddi League title

- Jaipur Pink Panthers won the Pro Kabaddi League Season 9 Final against a hard-fighting Puneri Paltan by a score of 33-29 to win their second PKL championship.
- After Patna, Jaipur Pink Panthers, the league's first-ever winners, are currently only the second team to win multiple titles.
- The tournament was played across Bengaluru, Pune, and Hyderabad while the playoffs were played in Mumbai. Jaipur Pink Panthers team is currently led by Sunil

Kumar Malik and coached by Sanjeev Baliyan.

- The team is owned by Abhishek Bachchan

Sahitya akademi awards 2022 announced

- The award has been given by the central government for the best literature of every year.
- Accordingly, the central government has announced the Sahitya Akademi Award for literature on December 22.
- Writer M. Rajendran from Tamil Nadu has received this award for his novel 'Kala Pani'.
- The awardee will be presented with a cash prize of one lakh rupees and a copper Shield. This 'Kala Pani' novel is a historical novel based on the war of Kalayarkovil or Kalayarkool.

Sethrichem Sangtam awarded Rohini Nayyar prize for rural development

- Rohini Nayyar prize: Sethrichem Sangtam, who helped triple the incomes of 1,200 marginalised farmers in Eastern Nagaland, was awarded the first Rohini Nayyar prize for outstanding contribution to rural development.
- The prize awarded to an individual 40 years or under in age, was presented by the Niti Ayog Vice-Chairman Suman Bery





Pralay Missile

In a major boost to the striking capabilities of the Indian armed forces, the defense ministry has recently cleared a proposal to purchase 120 Pralay missiles for the Indian Air Force and Army.

About:

- Pralay is an indigenous short-range ballistic surface-to-surface missile. The missile will be India's first tactical quasi-ballistic missile and will give the armed forces the capability to hit enemy positions and key installations in actual battlefield areas.
- Developed by: The solid-fuel, battlefield missile developed by the Defence Research Development Organisation (DRDO) is based on Prithvi Defence Vehicle from the Indian ballistic missile programme.
- Features:
- Pralay' is powered with a solid propellant rocket motor and other new technologies. The missile guidance system includes state-of-the-art navigation and integrated avionics, according to the DRDO.
- The advanced missile has been developed in a way to be able to defeat interceptor missiles. It has the ability to change its path after covering a certain range mid-air.
- It is capable of carrying a conventional warhead of about 350 kg to 700 kg, which gives it a deadly punitive capability.
- Range: The canisterised Pralay missile, has a range of 150-500 kilometres.
- Ballistic missiles: They are initially powered by a rocket or series of rockets in stages, but then follow an unpowered trajectory that arches upwards before descending to reach its intended target at high speed. Unlike intercontinental ballistic missiles that exit the Earth's atmosphere, short-range ballistic missiles stay within it.

ARNALA

Recently, the ARNALA ship is inducted into the Indian Navy.

About:

- The ARNALA ship is built under ASW SWC Project.

- Arnala class of ships will replace the Abhay class ASW Ships of the Indian Navy and are designed to undertake anti-submarine operations in coastal waters and Low-Intensity Maritime Operations (LIMO) including subsurface surveillance in littoral waters.
- The ship has been named Arnala to signify the strategic maritime importance accorded to the island of Arnala by the great Maratha warrior, Chhatrapati Shivaji Maharaj.

What is ASW SWC Project?

- It is the Anti-Submarine Warfare Shallow Water Craft project under which many ships are being built for the Indian Navy
- The ASW SWC ships will be capable of detecting and neutralizing various underwater threats.
- ASW SWC ships have a displacement of 900 tons with a maximum speed of 25 knots and an endurance of 1800 NM.
- These ships will have over 80% indigenous content, ensuring that large-scale defense production is executed by Indian manufacturing units thereby generating employment and capability build up within the country.

INS Vagir

The fifth submarine of the Project – 75, Kalvari Class submarines, Yard 11879 was delivered to the Indian Navy on December 20, 2022.

About INS Vagir:

- Vagir was launched into water on November 12, 2020 and commenced sea trials on February 1, 2022.
- It is having "superior stealth features" like advanced acoustic absorption techniques.
- The sixth and last of the Scorpène-class submarines, Vagsheer, was launched into water in April 2022 and is expected to be delivered to the Navy by end 2023.
- Six Scorpene submarines are being built under Project-75 by MDL under technology transfer from Naval Group of France under a \$3.75 billion deal signed in October 2005.
- The project is about four years behind schedule.

- The first submarine INS Kalvari was commissioned in December 2017, second submarine INS Khanderi in September 2019, third one INS Karanj in March 2021 and the fourth one INS Vela joined service in November 2021.

Cape Town to Rio Race 2023

INSV Tarini has set sail for an expedition to Cape Town, for participating in the Cape to Rio Race 2023.

About:

- INSV Tarini will start for an expedition to Cape Town, South Africa for participating in the 50th edition of Cape to Rio Race 2023.
- This ocean sailing race will be flagged off from Cape Town on 02 Jan 23 and will culminate at Rio de Janeiro, Brazil. The race is one of the most prestigious Trans-Atlantic ocean races.
- Transiting from Goa to Rio de Janeiro via Cape Town and back, INSV Tarini would be covering a distance of almost 17,000 nautical miles (approx. 30,000 km)
- The crew, over a period of 5-6 months in this trans-oceanic voyage is expected to face extreme weather and rough sea conditions of the Indian, Atlantic and the Southern oceans.

What is INS Tarini?

- It is the second sailboat of Indian Navy after INSV Mhedi.
- It is known for circumnavigating the globe with an all-women officer crew in the historic expedition titled 'Navika Sagar Parikrama' in 2017.

INS Mormugao

The Indian Naval Ship (INS) Mormugao, the second warship of the P15B class destroyer ship was recently commissioned.

About INS Mormugao:

- INS Mormugao is named after the historic port city of Goa on the west coast.
- INS Mormugao is the second of the four 'Visakhapatnam' class destroyers, indigenously designed by the Indian Navy's in-house organization Warship Design Bureau and constructed by Mazagon Dock Shipbuilders Limited (MDL), Mumbai
- Features:
- INS Mormugao is equipped with Anti-Submarine Warfare capabilities which

are provided by indigenously-developed Rocket Launchers, Torpedo Launchers, and ASW helicopters.

- The ship is equipped to fight under Nuclear, Biological, and Chemical warfare
- The ship's firepower consists of vertically launched Barak-8 surface-to-air missiles and BrahMos surface-to-surface cruise missiles for long-range engagement of shore- and sea-based targets.

INDIA-INDO CORPAT Exercise

The 39th edition of India-Indonesia Coordinated Patrol (IND-INDO CORPAT) between the Indian Navy and the Indonesian Navy is being conducted



About:

- India and Indonesia have been carrying out CORPATs twice a year since 2002.
- Aim: Keeping the vital part of the Indian Ocean Region (IOR) safe and secure for commercial shipping, international trade and conduct of legitimate maritime activities.
- CORPATs help build understanding and interoperability between navies, and facilitate institution of measures to prevent and suppress Illegal Unreported Unregulated (IUU) fishing, drug trafficking, maritime terrorism, armed robbery and piracy.
- It helps to enhance the operational synergy by exchange of information for prevention of smuggling, illegal immigration and for conduct of Search and Rescue (SAR) operations at sea.
- As part of Government of India's vision SAGAR (Security And Growth for All in the Region), Indian Navy has been proactively engaging with countries in the Indian Ocean Region (IOR) to enhance maritime security in the region.

Exercise Agni Warrior

The 12th Edition of Exercise Agni Warrior recently concluded on 30 November 2022

About:

- It is a bilateral exercise between the Singapore & Indian Army.
- Exercise Agni Warrior, involved showcasing joint firepower planning, execution and use of New Generation Equipment by the Artillery arm of both armies.
- Exercise also included participation by both sides in a joint computer war-game as part of joint planning process.
- Both sides utilised niche technology and Artillery Observation Simulators as part of joint training phase.
- Indigenously manufactured Artillery guns and howitzers also participated during the final phase of the exercise.
- The exercise achieved its aim of enhancing mutual understanding of drills & procedures and improving interoperability between the two armies.

KAZIND – 2022

- The 6th Edition of Indo – Kazakhstan joint training exercise “KAZIND-22” is conducted at Umroi (Meghalaya) from 15 to 28 December 2022.
- The scope of this exercise involves a Command Post Exercise (CPX) at the Battalion level and Company level Field Training Exercise (FTX) on sub-conventional operations.
- During the exercise, participants will engage in variety of missions ranging from joint planning, joint tactical drills, basics of special arms skills, HADR and raiding a hostile target

Veer Guardian 23

- Veer Guardian 23: Indian Air Force (IAF) and Japanese Air Self Defence Force (JASDF) are set to hold their maiden bilateral air exercise, “Veer Guardian 23”, from January 16 to 26 at Hyakuri air base and Iruma air base in Japan.
- The IAF is fielding four Su-30MKI fighters from No. 220 squadron under the Western Air Command and one IL-78 mid-air refueller, along with a contingent of around 150 personnel who will be transported by two C-17 transport aircraft.
- The JASDF would be fielding four F-15s and four F-2 fighter jets for the exercise

Defence Acquisition Council Clears Over ₹84,000 Crore Proposals

- In a step to augment the operational capabilities of the Armed Forces and the

Indian Coast Guard in future, the Defence Acquisition Council (DAC), headed by Defence Minister Rajnath Singh accorded approval for Acceptance of Necessity (AoN) for 24 Capital Acquisition Proposals.

- These proposals include six for the Indian Army, six for the Indian Air Force, 10 for the Indian Navy and two for the Indian Coast Guard for a total value of Rs 84,328 crore.

Exercise “SURYA KIRAN”

- The 16th Edition of exercise “SURYA KIRAN” will be conducted at Nepal Army Battle School, Saljhandi, and continue up to 29 December 2022.



About:

- It is an Indo-Nepal joint army training exercise.
- It is conducted annually between India and Nepal with the aim to enhance interoperability in jungle warfare and counter-terrorism operations in mountainous terrain and Humanitarian Assistance and Disaster Relief (HADR) under UN mandate.
- Nepal Army soldiers of Shree Bhawani Baksh Battalion and Indian Army soldiers from the 5 GR are participating in the exercise.



‘Brave Hearts of Bharat, Vignettes from Indian History’

- A book titled ‘Brave Hearts of Bharat, Vignettes from Indian History’ by Vikram Sampath, an anthology of 15 stories of men and women and their indomitable spirit of freedom and courage, was launched in Delhi.
- The book is published under Penguin publication. The book chronicles the stories of courage and determination of few individuals, whose stories largely remained untold and therefore unknown for a long time.

Miracles of Face Yoga

- The Founder of Manasvani, Mansi Gulati has released her book ‘Miracles of Face Yoga’, which has been appreciated by the President of India Droupadi Murmu.
- Mansi Gulati, an international Yogi, celebrated author, and thought leader, devoted her efforts to learning everything possible about yoga practices and philosophy.

The Light We Carry: Overcoming In Uncertain Times

- Light We Carry: Overcoming in Uncertain Times:
- The Light We Carry: Overcoming in Uncertain Times is a nonfiction book written by Michelle Obama and published, by Crown Publishing.
- The Light We Carry will inspire readers to examine their own lives, identify their sources of gladness, and connect meaningfully in a turbulent world.
- The author “shares the contents of her ‘personal toolbox’ – the habits and practices, attitudes and beliefs, and even physical objects that she uses to overcome her feelings of fear, helplessness and self doubt.

The Indian Navy@75

- A book titled, ‘The Indian Navy@75 Reminiscing the Voyage’ by Commodore

Ranjit B Rai (Retd) and defence journalist Aritra Banerjee.

- The books tells you how the exploits and sacrifices of the British-era Royal Indian Navy (RIN) during World War 2 were omitted by British historians who could not digest the RIN’s mutiny in 1946.

Forks in the Road: My Days at RBI and Beyond

- C Rangarajan authored a book titled “Forks in the Road: My Days at RBI and Beyond”. It was published by the Penguin Business (Penguin Group).
- The book is the memoir of Dr C. Rangarajan, an Indian economist, a former Member of Parliament, and the 19th Governor of the Reserve Bank of India (RBI).
- It discusses India’s transition from its post-independence planning era to the present times. The book is divided into 3 parts. Part 1- ‘RBI and Planning Commission’, Part 2- ‘Governor of RBI’ and Part 3- ‘Beyond RBI’



Supreme Court Judges Appointment

Justice Dipankar Dutta recently took oath as a judge of the Supreme Court. With the appointment of Justice Dutta, the Supreme Court will have 28 judges out of the strength of 34 judges.

About:

Appointment Procedure:

- Article 124(3) of the constitution mentions the following people as eligible to become a Supreme Court (SC) Judge:
- A High Court (HC) judge who has held that post for 5 years or more.
- An advocate who has practiced in the HC/SC for 10 years or more.
- A distinguished Jurist (no judge appointed on this basis till date).
- Article 124(2) says that the President of India Shall appoint the judges after consultation with such number of Judges of the SC/HC as he deems necessary. For appointment of any Judge of SC (other than CJI), the CJI must be consulted.
- The three Judges case of 1981, 1993 & 1998 has formalised the collegium system for the purpose of consultation.
- The collegium for appointing SC judge consists of the CJI and 4 senior-most judges of SC.
- Memorandum of Procedure (MoP) was set up after the Third Judge Case of 1998 to provide the process of how the Collegium would recommend names to the Executive.
- The President of India can either accept the recommendation or send it back for reconsideration.
- The reconsidered advice must be accepted by the President.

Rajeeva Laxman Karandikar named as chairperson of the National Statistical Commission

- Government of India had appointed Rajeeva Laxman Karandikar, Professor Emeritus at Chennai Mathematical Institute (CMI), as the part-time chairperson of the National Statistical Commission (NSC) of India for a period of three years.
- He will take up this role as an additional

responsibility while continuing as Professor Emeritus at CMI.

- He joined CMI as a visiting professor in 2010, and officiated as the Director of CMI from January 2011 to April 2021

Hansraj Gangaram Ahir named as the new NCBC chairperson

National Commission for Backward Classes (NCBC):

- Former Union Minister Hansraj Gangaram Ahir has assumed charge as Chairperson of the National Commission for Backward Classes (NCBC).
- He is an Agriculturist by profession, read a statement from the Ministry of Social Justice & Empowerment.
- He had been elected four times Member of Parliament from Parliamentary Constituency Chandrapur, Maharashtra and also he was Member of the Maharashtra Legislative Council.
- He had been Union Minister of State for Home Affairs and Union Minister of State for Chemicals and Fertilizers, Government of India the 16th Lok Sabha.

About National Commission for Backward Classes:

- National Commission for Backward Classes (NCBC) was initially constituted by the Central Govt by the National Commission for Backward Classes Act, 1993.
- The National Commission for Backward Classes Act, 1993 (27 of 1993) has been repealed through the National Commission for Backward Classes (Repeal) Act, 2018 dated 14.08.2018.
- The present Commission has been accorded Constitutional Status and constituted through “The Constitution (One Hundred and Second Amendment) Act, 2018” Act dated 11.8.2018, whereby Article 338B has been inserted, forming a Commission for the socially and educationally backward classes to be known as National Commission for Backward Classes

Meghna Ahlawat has been elected as first female president of TTF

- Table Tennis Federation of India 2022:
- Meghna Ahlawat was elected president of the Table Tennis Federation of India. Meghna Ahlawat has been elected its first female President, eight-time national champion Kamlesh Mehta takes over as the new secretary general of the TTFI and Patel Nagender Reddy has been elected as the Treasurer. Ahlawat, who is the wife of Haryana deputy chief minister Dushyant Chautala, contested against Gujarat home minister Harsh Sanghvi





IMPORTANT DAYS

World AIDS Day

- Every year, on 1 December, the world commemorates World AIDS Day
- People around the world unite to show support for people living with and affected by HIV and to remember those who lost their lives to AIDS.
- The day raise awareness and to unite people worldwide in the fight against the global health issue of acquired immunodeficiency syndrome.
- The day provides an opportunity for people worldwide to unite in the fight against HIV, to show support for people living with HIV and to commemorate those who have died from an AIDS-related illness.
- The World AIDS Day theme for 2022 is “equalize”
- World AIDS Day was first designated in August 1988 by James W. Bunn and Thomas Netter, to get some semblance of control over the pandemic that had claimed the lives of so many people.

BSF celebrates its 58th Raising Day on December 01

- 58th BSF Raising Day:
- India celebrates the 58th BSF Raising Day (1st December) in 2022. This is for the first time that the Raising Day Parade of India’s first line of defense is being held in Punjab and the second time outside the national capital. The 58th Raising Day Parade of the Border Security Force (BSF) will be held on December 4 on Guru Nanak Dev University campus



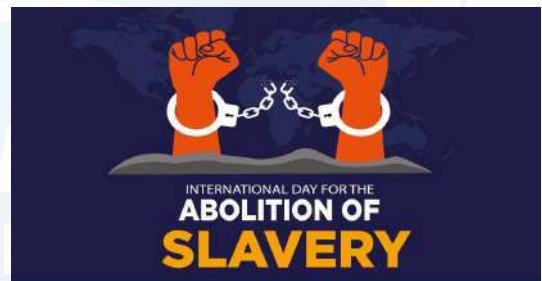
- Formed in 1965, the primary role of the BSF lies in securing the borders of India shared with Bangladesh and Pakistan. The Border Security Force (BSF) comprises Indian

armed personnel dedicated to protecting the sovereignty and integrity along the Indo-Bangladesh and the Indo-Pakistan borders

- They operate in West Bengal, Meghalaya, Assam, Mizoram, and Tripura along the Indo-Bangladesh border

International Day for the Abolition of Slavery: 2 December.

- The International Day for the Abolition of Slavery is celebrated, each year, on December 2.
- The day is observed to remind us of the evils of enslavement, forced labour, child labour, and sexual exploitation and trafficking and to eliminate slavery practised in our time.
- The International Day for the Abolition of Slavery highlights the history of slavery and why its complete abolition is necessary.
- Slavery continues to persist today through forced labour, child labour, trafficking of women and children and illegal organ harvesting, among others



National Pollution Control Day 2022 observed on 2nd December

National Pollution Control Day 2022:

- National Pollution Control Day is observed every year on 2 December in India.
- The day is recognized to commemorate the precious lives that were lost in the Bhopal Gas Tragedy, one of the greatest industrial disasters in the history of India.
- The main aim and objectives of celebrating the National Pollution Prevention Day 2022 in India is to create awareness among people about the judicious use of industries to prevent uncalled-for industrial disasters

International Day of Persons with Disabilities 2022: 3 December

- Every year since 1992, the International Day of Persons with Disabilities (IDPD) has been annually observed around the world on December 3. The annual observance of the International Day of Disabled Persons was proclaimed in 1992 by United Nations General Assembly resolution 47/3.
- It aims to promote the rights and well-being of persons with disabilities in all spheres of society and development, and to increase awareness of the situation of persons with disabilities in every aspect of political, social, economic and cultural life.
- In 2006, the Convention on the Rights of Persons with Disabilities (CRPD) was adopted which has further advanced the rights and well-being of persons with disabilities in the implementation of the 2030 Agenda for Sustainable Development

Nation observed Indian Navy Day on 4th December

Indian Navy Day 2022:

- Navy Day in India is observed annually on December 4 to recognise the contributions and accomplishments of Indian Naval forces.
- Indian Navy Day is observed to commemorate the attack and to pay tribute to all Navy personnel who sacrificed their lives while serving the country.
- The Indian Navy is a three-dimensional force that protects our country's interests above, on, and beneath the ocean's surface.
- Its main goal is to improve its position in the Indian Ocean Zone. Every year, various events are held on this day

Indian Navy Day: History

- During the India-Pakistan war in 1971, Pakistan launched an attack on Indian airbases on the evening of December 3. In response to their attack, India dispatched three missile boats, Nirghat, Veer, and Nipat, at top speed towards Karachi.
- The Operation Trident launch against Pakistan in 1971's Indo-Pakistan War is also remembered on this day. During Operation Trident, the Indian Navy played a critical role and sank 4 Pakistani vessels including PNS Khaibar. The Indian Navy sank four Pakistani ships. Those who died during the Indo-Pakistan War are also remembered on this day.

International Cheetah Day

- International Cheetah Day and Wildlife Conservation Day celebrated at National Zoological Park recently.

About:

- December 4 is marked as International Cheetah Day every year. The day is dedicated to encouraging people worldwide to help this animal win the race against extinction.
- American zoologist Dr Laurie Marker is credited with creating International Cheetah Day. Dr Marker founded the Cheetah Conservation Fund in 1991 and she designated December 4 as International Cheetah Day in 2010.

Cheetah

- It is one of the oldest of the big cat species, with ancestors that can be traced back more than five million years to the Miocene era.
- Namibia has the world's largest population of cheetahs.
- The fastest land animal in the world, a cheetah can reach 112km/h in just three seconds.
- In 1952, the Indian government officially declared the Cheetah extinct in the country. The cheetah is the only large carnivore to have gone extinct in India, primarily due to hunting and habitat loss.
- All cheetah subspecies are listed as vulnerable by the IUCN, except the Northwest African and Asiatic cheetah which are critically endangered at present.

Parakram Diwas

- Parakram Diwas will be celebrated at Jaisalmer Military Station and Longewala War Memorial in Rajasthan on December 5.

About:

- It is observed to mark the 51st anniversary of India's victory in the Longewala battle during the 1971 war.
- The Longewala battle between India and Pakistan in 1971 was one of the biggest and most decisive battles.
- On the night of 04/05 Dec 1971, Pakistan forces comprising 4000 soldiers, T-59 & Sherman tanks, and a medium artillery battery attacked Longewala border post held by 23 PUNJAB.
- In spite of being outnumbered, Indian soldiers gallantly held the post and requisitioned support of IAF.
- At the dawn of 5th Dec 1971, the Hunter aircraft based at Jaisalmer wreaked havoc on the Pakistani troops with their devastating fire power.

International Volunteer Day for Economic and Social Development: 5 December

International Volunteer Day for Economic and Social Development 2022:

- International Volunteer Day for Economic and Social Development is observed on December 5 every year.
- The day is also referred to as International Volunteer Day (IVD) to recognize and promote the tireless work, not just of UN Volunteers, but of volunteers across the globe.
- The international observance was mandated by the United Nations (UN) General Assembly in 1985. The day commemorates 80 countries in the world.

World Soil Day observed on 5th December

World Soil Day 2022

- December 5 is celebrated annually as World Soil Day to highlight the importance of healthy soil and promote sustainable management of soil resources.
- The event aims to raise awareness of the importance of soil quality for human well-being, food security and ecosystems, and events are held at the UN FAO offices and through community based events.
- The day was first considered by the International Union of Soil Sciences in 2002, but was not officially endorsed by FAO until 2013.
- The theme for 2022 World Soil Day is 'Soils: Where Food Begins'

International Civil Aviation Day observed on 7th December

- International Civil Aviation Day 2022: The aim behind celebrating the day is to create awareness across the world about the importance of international civil aviation to the social and economic development of States.
- Also, the unique role of the organization in helping States to cooperate and realize a global transit network at the service of all mankind.

National Armed Forces Flag Day 2022: 7th December

- Every year on December 7, India

commemorates Armed Forces Flag Day in order to raise donations for the welfare of the Armed Forces Staff.

- This day is observed to honour Indian soldiers, sailors, and pilots.
- The day also pays tribute to hundreds of thousands of men who have died protecting the country.

Nation remembers Dr B R Ambedkar on his 67th Mahaparinirvan Diwas

- India observed December 6 as 67th Mahaparinirvan Divas to mark the death anniversary of Dr Bhimrao Ramji Ambedkar. President Droupadi Murmu, Vice President Jagdeep Dhankhar and Prime Minister Narendra Modi paid floral tributes to Babasaheb Dr B.R. Ambedkar on his Mahaparinirvan Diwas at Parliament House Lawns in New Delhi

SAARC Charter Day 2022: 8th December

- The South Asian Association for Regional Cooperation (SAARC) Charter Day is observed every year on 8th December.
- On this day in 1985, SAARC Charter was adopted in Dhaka, during the first summit of the group.
- This year marks the 38th Anniversary of the regional group.
- The charter was signed by the Leaders of SAARC Countries Heads of State or Government of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka at the First SAARC Summit held in Dhaka, Bangladesh



International Anti-Corruption Day observed on 9th December

- The world celebrate International Anti-Corruption Day on December 9.
- The main motive behind marking this day is to spread awareness about a corruption-free society.
- Everyone knows that corruption affects every area of society.
- The purpose behind a day of this kind is to make people aware of the repercussions of indulging in corruption and motivate them to follow a righteous path
- This year, the theme for International Anti-Corruption Day is “Uniting the world against corruption.”

72nd Human Rights Day 2022 observed on 10th December

- Human Rights Day is observed every year on 10th December - the day the United Nations General Assembly adopted, in 1948, the Universal Declaration of Human Rights (UDHR).
- The UDHR established a set of common basic values both with regard to the view of human beings and to the relationship between the state and the individual.
- 2020 Theme: Recover Better - Stand Up for Human Rights.
- Universal Declaration of Human Rights (UDHR):
- The 30 rights and freedoms include civil and political rights, like the right to life, liberty, free speech and privacy and economic, social and cultural rights, like the right to social security, health and education, etc.
- India took active part in drafting of the UDHR.
- The UDHR is not a treaty, so it does not directly create legal obligations for countries.

International Mountain Day 2022: 11 December

- International Mountain Day 2022 is an opportunity to promote gender equality and therefore contribute to improving social justice, livelihoods and resilience.
- The theme of this year’s International Mountain Day (IMD) on 11 December will be Women move mountains.
- Women play a key role in mountains’ environmental protection and social and economic development.
- They are often the primary managers of mountain resources, guardians of biodiversity, keepers of traditional knowledge, custodians of local culture, and experts in traditional medicine.

UNICEF Day observed on 11 December

- Every year UNICEF Day is celebrated

on December 11 every year. The word UNICEF stands for United Nations International Children’s Emergency Fund and the purpose served by the organisation is to save children’s lives by providing them with humanitarian aid across the world.

- The main purpose of the organization is to provide humanitarian aid to children around the world. It was originally intended as a relief fund to help children after World War II

International Day of Neutrality observed on 12 December

- International Day of Neutrality 2022:
- International Day of Neutrality is commemorated on December 12.
- It is a day when people look at the possibility of a world free of armed and other types of conflicts.
- Its focus was on advocating and campaigning for intra-state peaceful relations.
- Switzerland serves as the perfect example of neutrality.

International Universal Health Coverage Day 2022: 12th December

- International Universal Health Coverage Day is celebrated annually on 12th December.
- The day is marked to promote the importance of building robust, resilient, world-class healthcare systems globally.
- International Universal Health Coverage Day aims to raise awareness of the need for strong and resilient health systems and universal health coverage with multi-stakeholder partner

National Energy Conservation Day 2022: 14 December

- The National Energy Conservation Day is celebrated every year on 14th December 2022.
- The purpose is to showcase the achievements of the nation in energy efficiency and conservation.
- This occasion has been celebrated since 1991 when is led by the Ministry of power.
- This day is celebrated to raise awareness regarding the conservation of energy as it is the best way to have a greener and brighter future
- National Energy Conservation Day 2022
- The National Energy Conservation Day is celebrated every year on 14th December 2022.



About National Energy Conservation Day 2022:

- The purpose is to showcase the achievements of the nation in energy efficiency and conservation.
- National Energy Conservation Award 2022:
- To raise awareness about energy efficiency and its conservation, the BEE, under the guidance of Ministry of Power, recognizes and encourages endeavours of industrial units, institutions, and establishments in reducing energy consumption by felicitating them with Energy Conservation Awards on the occasion of National Energy Conservation Day, celebrated on 14th December every year

Vijay Diwas



- The Nation is celebrating Vijay Diwas on December 16 to commemorate India's victory over Pakistan in 1971 Bangladesh Liberation war.
- About Vijay Diwas:
- On December 16, 1971, the chief of the Pakistani forces, General Amir Abdullah Khan Niazi, along with 93 thousand troops, had surrendered unconditionally to the allied forces consisting of Indian Army and Mukti Bahini, led by Lieutenant General Jagjit Singh Aurora in Dhaka after their defeat in the Liberation war.
- The war resulted in the birth of Bangladesh, which was then East Pakistan.
- The day is also observed in Bangladesh as 'Bijoy Dibos', marking the country's formal independence from Pakistan.
- India had also held 93,000 prisoners-of-war by the end of war on December 16.
- Eight months after the war, in August 1972, India and Pakistan settled the Shimla agreement.
- Under the agreement, India agreed to release the 93,000 Pakistani prisoners-of-war

International Migrants Day 2022: 18 December

- International Migrants Day 2022: It is observed on 18 December every year to raise awareness regarding the challenges and difficulties faced by migrants.
- It has been seen that today more people live in a country other than the one in which they were born.
- According to the UN, the number of migrants globally reached an estimated 272 million in 2019 more than in 2010 which is 51 million.
- The proportion of international migrants in the world population has also risen compared to 2.8 percent in 2000 and 2.3 percent in 1980.
- Some individuals migrate out of choice and many others migrate out of necessity.

National Minorities Rights Day 2022: 18 December

- National Minorities Rights Day is commemorated on December 18 every year in India.
- Its aim is to safeguard the individual rights of the religious, ethnic, racial, or linguistic minorities in the country.
- This day is a reminder about the rights of minorities and to raise awareness about it.
- Minority Rights Day in India is commemorated by conducting debates and seminars on topic related to minority communities

International Human Solidarity Day 2022: December 20

- International Human Solidarity Day (IHSD) is observed annually on December 20 across the globe to celebrate the ideal of unity in diversity.
- IHSD highlights the goal of the United Nations and its member states to create awareness about poverty and the need to reduce poverty in independent nations.

Union Minister Jitendra Singh inaugurates Good Governance Week 2022.

- Union Minister for Personnel, Public Grievances and Pensions Dr. Jitendra Singh has inaugurated Good Governance Week celebrations from 19-25 December 2022 at Vigyan Bhawan in New Delhi.
- Offering his homage to India's former Prime

Minister, Bharat Ratna Late Atal Bihari Vajpayee ji, in whose memory the Good Governance Day and Good Governance Week are celebrated.

- The Minister also launched a five-day “Prashasan Gaon Ki Ore” a nationwide Campaign, to commemorate the birth anniversary of former Prime Minister Atal Bihari Vajpayee

National Mathematics Day 2022 celebrates on 22 December

- National Mathematics Day is celebrated on December 22 across the nation every year.
- The National Mathematics Day is marked to recognise and celebrate the works of Srinivasa Ramanujan.
- Srinivasa Ramanujan, the Indian mathematical genius, was born on this day in 1887.
- This year nation celebrates his 135th birth anniversary of Ramanujan.
- The main objective behind the celebration of National Mathematics Day is to make people aware of the development of mathematics and its importance in the growth of humanity

National Farmer's Day

- National Farmer's Day being observed on December 23.

About National Farmer's Day:

- National Farmer's Day is celebrated every year.
- National Farmer's Day is being observed on December 23 to commemorate the birth anniversary of the fifth Prime Minister of India, Chaudhary Charan Singh, and his contributions towards the upliftment of farmers in the country.
- The Kisan Leader, Chaudhary Charan Singh, served as president from July 28, 1979, until January 14, 1980.
- In 2001, the government declared Kisan Diwas in honor of Charan Singh's birth anniversary.
- On this day, awareness campaigns and drives are organised across the country to educate people about the role of farmers and their contribution to the economy.

National Consumer Rights Day 2022: 24 December

- Every year on December 24, India observed the National Consumer Day or Bharatiya

Grahak Diwas. This day is used to make all consumers aware of their powers and rights. This day was made under the Consumer Protection Act, which came to power in 1986 to create awareness and save consumers from market exploitation like defective products or expensive pricing

Good Governance Day

- In 2014, the then newly-elected Narendra Modi government announced that December 25 would be celebrated as “Good Governance Day”.

About:

- It is observed on the occasion of former Prime Minister Atal Bihari Vajpayee's birth anniversary.
- It aims to increase awareness of government services and accountability among people and inculcate “good governance” as a habit for civil servants.
- The day is celebrated to ensure that the country's residents are treated fairly by the government and they receive advantages of various government services.
- In 2019, the government launched the Good Governance Index on this occasion.
- The GGI is a scientifically prepared tool based on various parameters of good governance which assess the level of any state at a given point of time and help in shaping future development.

Veer Bal Diwas

- Prime Minister of India had recently announced that 26th December will be observed as ‘Veer Bal Diwas’, to mark the martyrdom of Sri Guru Gobind Singh's sons.

About Veer Bal Diwas:

- On December 26, 1707, Sahibzada Zorawar Singh and Sahibzada Fateh Singh attained martyrdom when they were executed on the orders of Aurangzeb.
- Who is Guru Gobind Singh?
- He was the 10th Sikh guru.
- He became the Sikh guru at the age of nine, following the demise of his father, Guru Tegh Bahadur, the ninth Sikh Guru.
- Also known for his significant contributions to the Sikh religion, including the introduction of the turban to cover hair.
- He is renowned for founding the principles of Khalsa or the Five ‘K’s i.e kesh (uncut

hair), kanga (wooden comb), kara (iron or steel bracelet), kirpan (dagger) and kachera (short breeches).

- He fought against the Mughals later in the battle of Muktsar in 1705.
- Guru Gobind Singh was killed by a Mughal assassin in 1708, a year after the death of Aurangzeb..





National Energy Efficiency Innovation Awards (NEEIA) 2022:

- To recognize outstanding work and innovative minds of India in the area of Energy Efficiency, NEEIA awards were started in the year 2021.
- The awards are evaluated based on Replicability, Affordability, Reliability, Impact on Energy Savings and Impact on Environment & Sustainability.

National Painting Competition 2022:

- To continually bring change in society towards conservation and efficient use of energy, the Ministry of Power has been organizing the National Painting Competition on Energy Conservation since 2005.
- The competition is held in three stages, namely, School, State and National Level.

Central Pollution Control Board (CPCB)

- A recent report from the (CPCB) said that the number of polluted stretches in India's rivers has fallen from 351 in 2018 to 311 in 2022 though the number of most polluted stretches is practically unchanged

About:

- The CPCB network monitors water quality at 4,484 locations in 28 States and seven Union Territories including rivers, lakes, creeks, drains and canals.
- The number of polluted river stretches categorised in 'Priority 1 to 5.
- Priority 1: River stretches with a BOD exceeding 30 mg/L are considered the most polluted and thus need the most urgent remediation.
- Priority 2: Indicating a BOD of 20-30 mg/L.
- Priority 3: BOD between 10-20 mg/l
- Priority 4: BOD between 6-10 mg/l.
- Priority 5: Indicating 3-6 mg/L.
- While Gujarat and Uttar Pradesh had the maximum number of 'Priority 1' river stretches (6), Maharashtra had the maximum

number of polluted river stretches i.e. 55, followed by Madhya Pradesh (19), Bihar (18), Kerala (18), Karnataka (17) and Uttar Pradesh (17).

What is Biological Oxygen Demand (BOD)?

- BOD is defined as the amount of dissolved oxygen needed by bacteria in decomposing the organic wastes present in water. The higher value of BOD indicates low dissolved oxygen content of water.

What is Central Pollution Control Board (CPCB)?

- The Central Pollution Control Board (CPCB) of India is a statutory organisation under the Ministry of Environment, Forest and Climate Change.
- It was established in 1974 under the Water (Prevention and Control of Pollution) Act, 1974.
- CPCB was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.
- Bureau of Energy Efficiency has developed a Mobile Application to facilitate in-vehicle navigation to the nearest public EV charger, a website to disseminate information on various central and state-level initiatives to promote e-mobility in the country, and a web-portal to enable CPOs to register their charging details securely into the National Online Database.
- The Mobile application titled "EV Yatra" has been designed and developed to facilitate in-vehicle navigation to the nearest public EV charger.

Cold Wave

- India Meteorological Department (IMD) has recently said, the Cold wave conditions will continue in Northern India till December 29, 2022
- What is a cold wave?
- The IMD records a cold wave when the minimum temperature is equal to or less than 10 degree Celsius at a weather station in the plains, and is 5 degrees to 6.4 degrees below the normal temperature for that period.

- A cold wave may also be recorded at a station in the plains when the minimum temperature is less than or equal to 4 degree Celsius.
- For hilly regions, a cold wave is declared when the minimum temperature is less than or equal to 0 degree Celsius and the minimum temperature is 4.5 degrees to 6.4 degrees below the normal.
- The 'normal' temperature is calculated for every five days by taking the average temperature for these days over the past 30 years

Green Rating for Integrated Habitat Assessment (GRIHA)

Recently, The Unique Identification Authority of India (UIDAI) headquarters in New Delhi has won the prestigious GRIHA Exemplary Performance Award 2022.

About Green Rating for Integrated Habitat Assessment (GRIHA):

- UIDAI believes in and promotes the idea of recycling and reusing to reduce carbon footprint.
- It has been harnessing solar power to meet a portion of its energy consumption.
- It is recycling and reuses water and has been adhering to sustainable waste management practices.

What is GRIHA?

- It is the national rating system of India for any completed building construction.
- It was jointly set up by The Energy and Resources Institute (TERI) and the Ministry of New and Renewable Energy.
- Objective: To help design green buildings and help evaluate the 'greenness' of the buildings.

Parameters used in Rating:

- Site selection and planning
- Conservation and efficient utilization of resources
- Building operation and maintenance

E-20 Fuel

- Union Petroleum and Natural Gas Minister has recently said that India will soon launch E-20 fuel with 20% blending of ethanol.

About E-20 Fuel:

- The E20 fuel is a twenty percent blend of Ethanol and eighty percent of fossil based fuel.
- The introduction of E20 fuel has the motive of reducing the reliance on fossil based fuels for building a more sustainable society for the future and to reduce vehicular emissions.

- It is expected to reduce air pollution, being lesser polluting than petrol.
- The government foresees oil import savings to the tune of Rs. 30,000 crores annually.
- What is Ethanol fuel?
- Ethanol fuel is ethyl alcohol, the same type of alcohol found in alcoholic drinks.
- It is most commonly utilized as a motor fuel, primarily as a biofuel addition in gasoline. Biomass is commonly utilized for making ethanol, such as corn or sugarcane. India's abundance of sugarcane production is pivotal to the push towards ethanol based fuel.

Flex engines:

- Flex engines are those that can run at any ratio of ethanol blending from E20 to E100.
- These types of engines and cars are not new.
- The Fiat 147, launched in 1978 in Brazil, was the first production car to run solely on ethanol.



Wayanad Rice Festival

A Kerala-based organisation named Thanal has embarked on a unique conservation experiment, planting 300 climate-resilient varieties of traditional rice on 1.5 acres of land at its agroecology centre in Panavally in the Wayanad district.

About Wayanad Rice Festival:

- The initiative aims to sensitise people to the significance of conserving traditional crops that have the ability to withstand harsh climatic conditions.
- Thanal has been organising annual “rice field weeks” since 2012.
- The festival also sets the stage for knowledge sharing and co-creation of knowledge between tribal farmers and experts.
- Thanal also launched the Rice Diversity Block (RDB) at Panavally under the Save Our Rice campaign in 2009, with a collection of 30 varieties of rice.
- Most of the varieties were collected from Kerala, Karnataka, Assam, Tamil Nadu, Arunachal Pradesh, Maharashtra and West Bengal.
- Many varieties are drought-resistant and flood-tolerant, while others have aromatic and medicinal properties.
- The Thondy variety, a traditional and popular rice among the people in Wayanad a few decades ago, could compete with any hybrid rice in terms of productivity.
- Black rice varieties are rich in minerals like zinc, iron and other nutrients.
- India had nearly 1.5 lakh varieties of rice, with about 3,000 varieties unique to Kerala.

Palm-Leaf Manuscript Museum

Kerala Chief Minister will inaugurate a palm-leaf manuscript museum with modern audio-visual technology at the renovated Central Archives, Fort in Thiruvananthapuram.

About Palm-Leaf Manuscript Museum:

- It was set up by the Department of Archives, Kerala Government.
- The ₹3-crore museum has eight theme-based galleries where select manuscripts from one of the biggest palm-leaf collections in the country will be displayed.
- As many as 187 old and rare manuscripts

stored at Central Archives and the department’s regional offices in Ernakulam and Kozhikode will be housed in the museum.

- The manuscripts in ancient scripts such as Vattezhuthu, Kolezhuthu, Malayanma, and ancient Tamil and Malayalam are present in the museum.
- The manuscripts which delve into aspects as diverse as tax, administration, and trade to education, prisons, and festivals in the erstwhile Travancore, Kochi, and Malabar provide a fascinating glimpse of history that is rarely accessible to the common man.
- Besides palm-leaf manuscripts, scrolls, bamboo splints, and copper plates are included in the collection.

UNESCO World Heritage Sites

Recently, Six sites have been added to India’s tentative list of UNESCO world heritage sites.

About:

- Three heritage sites were added to the tentative list of UNESCO World Heritage sites namely; the Sun Temple at Modhera and Vadnagar town from Gujarat and rock-cut relief sculptures of Unakoti of Tripura.
- According to UNESCO, A Tentative List is an inventory of those properties which each nation intends to consider for nomination.

Sun Temple of Modhera

- The Sun Temple, Modhera dedicated to Surya dev (The Sun God), is one of the remarkable gems of temple architecture in India.
- It is an exemplary model of the Marugurjara architecture style of the 11th century of western India under the patronage of the Solanki dynasty. The age of the temple may be inferred from its style belonging to the reign of Bhimadeva I (1022-1063 CE).
- It consists of the main temple shrine (garbhagriha), a hall (gadhmandapa), an assembly hall (Sabhamandapa or rangamandapa) and a sacred pool (Kunda) which is now called Ramakunda.
- This east-facing temple is built of bright yellow sandstone.
- Other sun temples in India are 8th century

CE Martand Sun Temple in Kashmir and the 13th century CE Sun temple at Konark.

Rock-cut relief sculptures of Unakoti

- The site of Unakoti Rock-cut relief sculptures is located in the north-eastern part of Tripura, which was built during 8th to 12th CE.
- The vertical surface of the Unakoti hills was used by the ancient people to carve various mythological scenes such as the different iconographic forms of Siva, Ganesha, Uma-Maheshwara.
- The images found at Unakoti can be classified into two categories:
- Majestic rock-cut images on the vertical surface of the hill and fallen boulders.
- Loose sculptures of smaller and medium sizes scattered on the hill.
- The influence of Buddhism is also seen in the sculptures of the region. There are various depictions of Boddhisattavas, Buddha and Buddhist motifs also found here.
- Many images found in this area also suggest the presence of religious sects such as Sakta, Tantric, Bajrayanis and Nathayogis.

Hornbill Festival

- In Nagaland, the 10-day long Hornbill Festival 2022 will begin on December 1, at Naga heritage village Kisama

About:

- The first festival was held in 2000.
- Venue: It is held at Naga Heritage Village, Kisama which is about 12 km from Kohima in Nagaland.
- Organizers: It is organized by the State Tourism and Art & Culture Departments of the Government of Nagaland.
- Objective: To encourage inter-tribal interaction and to promote cultural heritage of Nagaland.

Key highlights of festival:

- Festival highlights include the traditional Naga Morungs exhibition and the sale of arts and crafts, food stalls, song and dance shows, indigenous games etc.
- One of the major highlights of this festival is the Hornbill International Rock Festival where local and international rock bands perform.

Nomenclature:

- The festival is named after the bird “Indian hornbill”, which is displayed in the folklore of most of the state’s tribes.

- There are 9 hornbill species in India of which Great Hornbill is the most famous.
- It is also called the ‘Festival of Festivals’.

Great Hornbill:

- Scientific name: Buceros bicornis.
- Common name: Great Indian hornbill or great pied hornbill.

Range:

- It is found in the Indian subcontinent and Southeast Asia.
- The bulk of the population is found in India, where it is restricted to the Himalayan foothills, hill forests in northeast India and, disjunctly, the wet evergreen forests of west India.

Conservation:

- IUCN Status: Near Threatened.
- It is listed in Appendix I of CITES.

Importance:

- Its impressive size and colour have made it important in many tribal cultures and rituals.
- The great hornbill is the state bird of Kerala and Arunachal in India.
- It is not a state bird of Nagaland, although the hornbill festival is celebrated in Nagaland. Nagaland’s state bird is: Blyth’s tragopan.



dokra metalcraft.

- Lalbazar, on the boundary with Jharkhand, is becoming a hub for dokra metalcraft.

About Dokra Metal Crafts:

- Dhokra is a form of ancient bell metal craft practiced by the Ojha metal smiths living in states like Jharkhand, Chhattisgarh, Odisha, West Bengal and Telangana.
- However, the style and also the workmanship of this artisan community varies in different states.
- Dhokra or Dokra, is also known as bell metal craft.
- Its documented history is about 5,000 years old.
- Making dokra art is a difficult process. Each

figurine takes about a month to make.

- Dokra artifacts are mainly made in brass and are highly unique wherein the pieces do not have any form of joints. The whole object is fully handcrafted.
- The traditional designs are considered highly aesthetic in nature and a collector's delight.

Panini

A grammatical problem that has defeated Sanskrit scholars since the 5th Century BC has finally been solved by Rishi Rajpopat, an Indian PhD student at the University of Cambridge

About Panini, the 'father of linguistics':

- Panini probably lived in the 4th century BC, the age of the conquests of Alexander and the founding of the Mauryan Empire, even though he has also been dated to the 6th century BC, the age of The Buddha and Mahavira.
- He likely lived in Salatura (Gandhara), which today would lie in north-west Pakistan, and was probably associated with the great university at Taksasila, which also produced Kautilya and Charaka, the ancient Indian masters of statecraft and medicine respectively.
- 'Ashtadhyayi', or 'Eight Chapters', an ancient text written by the scholar Panini towards the end of the 4th century BC.
- It is a linguistics text that set the standard for how Sanskrit was meant to be written and spoken.
- It delves deep into the language's phonetics, syntax and grammar, and also offers a 'language machine', where one can feed in the root and suffix of any Sanskrit word, and get grammatically correct words and sentences in return.
- Panini's grammar, which built on the work of many earlier grammarians, effectively stabilised the Sanskrit language.
- The Ashtadhyayi laid down more than 4,000 grammatical rules.
- Later Indian grammars such as the Mahabhasya of Patanjali (2nd century BC) and the Kasika Vritti of Jayaditya and Vamana (7th century AD), were mostly commentaries on Panini.

Ramappa Temple

President of India lays the Foundation Stone for the Development of Pilgrimage Infrastructure at Ramappa Temple.

About:

- Ramappa Temple, also known as the Rudreshwara temple, is a Kakatiya style

Hindu temple dedicated to the god Shiva, located in Telangana.

- The medieval Deccan Ramappa Temple which dates back to 1213 AD, was built by the patronage of the Kakatiya ruler Kakati Ganapathi Deva under the authority of his Chief Commander Rudra Samani.
- The temple got its name Ramappa because of its chief sculptor Ramappa. Ramappa Temple is probably the only temple in India that is named after the architect.
- In 2021, the temple was inscribed as a UNESCO World Heritage Site as "Kakatiya Rudreshwara (Ramappa) Temple, Telangana".

Architectural features:

- Earthquake-proof: Made out of clay mixed with acacia wood, chaff and myrobalan fruit (a family of amla), the bricks used in building the gopuram of the temple are light enough to float on water. Using this technique has made the temple light, meaning, in case of a natural event like an earthquake, the probability of it collapsing would be very low.
- Sandbox technique: The temple construction was done using the sandbox technique. This is a technique where the foundation pit is filled with a mixture of sand-lime, jaggery and black myrobalan fruit. This mix acts as a cushion in case of earthquakes.
- The temple's many carved pillars are positioned in such a way that when the sunlight hits these pillars. One of the pillars has a Lord Krishna carved into it. When gently hit, the pillar produces musical notes.

Dhanu Yatra

The 'Dhanu Yatra' festival began after a gap of two years, in Bargarh at the Odisha.



About:

- Dhanu Yatra is an annual drama-based open-air theatrical performance celebrated in Bargarh, Odisha.
- It is considered the largest open-air theatre in the world. Spread over five square km,

the entire town of Bargarh turns into a stage for the yatra.

- The 'Dhanu Yatra' which marks the victory of good over evil, came into existence in Bargarh in 1947-48 as part of the celebration of the country's Independence and is held annually.
- Theme: The plays in the festival start with the dethroning of Emperor Ugrasen of Mathura by angry Kansa over the marriage of his sister Devaki with Vasudev. The festival will conclude with the death of demon king Kansa and restoration of the throne to Ugrasen.

Srimukhalingam Temple

- Recently, the Srimukhalingam temple chief priest urged the Archaeological Survey of India (ASI) to get the historic Siva temple included in UNESCO's list of World Heritage Sites



About Srimukhalingam Temple:

- Some architectural masterpieces were created by the rulers of the Eastern Ganga dynasty in the then-capital of the Kalinga kingdom.
- Srimukhalingam temple is dedicated to Lord Shiva, known as Sri Mukha Lingeswara Swamy, housing 3 Ancient Temples at one Location.
- The Trinity of Madhukeswara, Someswara and Bheemeswara Temples are a testimony to the magnificent architectural skills of Kalinga Kings.
- This temple is built in Kalinga architectural style on the banks of the Vamsadhara river.

Gujarat's Vadnagar

- Two sites in Gujarat have recently made it to the tentative list of UNESCO World Heritage sites: Vadnagar, and the Sun Temple of Modhera, both in the Mehsana district of northern Gujarat.

About Vadnagar:

- Vadnagar, a city known by names like

Vridhanagar, Anandapur, Anantapur and Nagar, is said to have been inhabited uninterruptedly for over 2,700 years.

- The town represents a continuously evolving historic urban landscape/area which played a major role in the hinterland trade network of Western India.
- The continuity of the historic town proves its resilience and outstanding universal value unlike the sites like Harappa and Kalibangan, (Rajasthan) which were abandoned eventually.

Significance:

- The town's fortifications, arched gateways (toranas), temples, wells, residential structures (kothis) and excavated sites like Buddhist monasteries and dedicated stupas showcase the architectural influence of various cultural periods.
- The extensive water management system here has also played a role in the town's continuity.
- The study of the historical geography of ancient India reveals Vadnagar was situated at a strategic location of two major ancient trade routes:
 - one joining central India with the Sindh and further northwest regions, while another connected the port towns on Gujarat's coast to northern India.
 - Excavated cowry shells traced to the Maldives further imply involvement in overseas trade.
 - A gold coin, believed to be from the Mamluk dynasty of Egypt that dated back to the 15th century, was also found.
 - The first excavations in Vadnagar happened in 1953-54 and were later taken up by the Gujarat state archaeology and museum directorate in 2006.

Vadnagar: A centre of Buddhism:

- Chinese traveller Xuanzang or Hieun Tsang is said to have visited Vadnagar around 641 AD, referring to it as 'Anandpur' in his writings, which also record how more than 1,000 monks of the Sammitiya School or Little Vehicle lived in 10 monasteries at Vadnagar.

2022 DECEMBER MONTH QUESTIONS

1) Consider the following statements

- 1) It is a city diplomacy initiative launched on December 12, 2017, at the One Planet Summit in Paris.
- 2) Urban-20 (U20) provides a platform for cities from G20 countries to facilitate discussions on various important issues of urban development including climate change, social inclusion, sustainable mobility, and affordable housing, and propose collective solutions.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

2) Consider the following statement

- 1) The Traditional Knowledge Digital Library (TKDL) is a pioneering Indian initiative, jointly by the CSIR and Ministry of AYUSH.
- 2) It aims to prevent exploitation and to protect Indian traditional knowledge from misappropriation by way of wrongful Intellectual Property Rights .

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

3) Consider the following statements

- 1) It is a statutory authority established under the International Financial Services Centres Authority Act, 2019
- 2) The IFSCA aims to develop a strong global connection and focus on the needs of the Indian economy as well as to serve as an international financial platform for the entire region.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

4) Consider the following statements

- 1) The International Financial Services Centres Authority consist of nine members, appointed by the central government.
- 2) They will include the chairperson of the authority, a member each from the RBI, SEBI, the Insurance Regulatory and Development

Authority, and the Pension Fund Regulatory and Development Authority.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

5) Congress foundation day is celebrated on

- a) December 24
- b) December 26
- c) December 27
- d) December 28

6) Consider the following statements

- 1) In Surat in 1906, the divisions between the 'moderates' led by Gopal Krishna Gokhale and Surendranath Banerjea, and the 'extremists' led by Bal Gangadhar Tilak came to the fore and there was a split.
- 2) But by 1915, the Bombay session saw these two groups coming together again as one.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

7) Operation Vijay is known for

- a) Pakistan war
- b) Goa liberation day
- c) Rescuing Indians from gulf countries
- d) Rescuing people during corona pandemic

8) Onattukara Ellu (sesame), Kanthalloor-Vattavada Veluthulli (garlic), and Kodungalloor Pottuvellari are native to

- a) kerala
- b) Karnataka
- c) Andhra Pradesh
- d) Telanagana

9) Consider the following statements

- 1) E Sport is an multisport event will be taken care of by Department of Sports under the Ministry of Youth Affairs and Sports. Meanwhile, 'Online Gaming' will be under MEITY (Ministry of Electronics and Information Technology)

- 2) E-Sports, short for electronic sports, is a form of competition using video games
Which of the above statements is/are correct?
a) 1 only
b) 2 only
c) Both 1 and 2 are correct
d) Neither 1 nor 2 are correct

10) Consider the following statements

- 1) NEC is not a constitutional body, but a statutory organization established under the North Eastern Council Act, 1971, as amended in 2002.
2) It is the nodal agency for the economic and social development of the North Eastern Region which consists of the eight States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura

Which of the above statement is/are correct?

- a) 1 only
b) 2 only
c) Both 1 and 2 are correct
d) Neither 1 nor 2 are correct

11) Consider the following statement

- 1) The India Internet Government Forum is an initiative associated with the UN Internet Governance Forum (UN-IGF).
2) The Internet Governance Forum (IGF) is a multi-stakeholder platform bringing representatives together from various groups, all at par to discuss public policy issues related to the Internet

Which of the above statements is /are correct?

- a) 1 only
b) 2 only
c) Both 1 and 2 are correct
d) Neither 1 nor 2 are correct

12) Consider the following statements regarding District Disability Rehabilitation Centres (DDRC)

- 1) It is an initiative by the Ministry of Social Justice and Empowerment, Govt. of India, to facilitate comprehensive services to Persons with Disabilities in the rural areas.
2) It is a joint venture of Central and State Governments wherein Central Government will establish, initiate, implement the centre for three years involving funding for man power contingencies as well as required equipments and coordination.

Which of the above statement is /are correct?

- a) 1 only
b) 2 only
c) Both 1 and 2 are correct
d) Neither 1 nor 2 are correct

13) Consider the following statement New India Literacy Programme

- 1) It aims to support the States and Union Territories in promoting literacy among non-literates in the age group of 15 and above.
2) The programme aims to cover a target of 5.00 crore learners during the five years under Foundational Literacy and Numeracy component.

Which of the above statement is/are correct?

- a) 1 only
b) 2 only
c) Both 1 and 2 are correct
d) Neither 1 nor 2 are correct

14) Consider the following statements

- 1) India International Science Festival was first held in Delhi in 2015.
2) It is an initiative of Ministry of Science and Technology and Ministry of Earth Science of Government of India in association with Vijnana Bharati

Which of the above statements is /are correct?

- a) 1 only
b) 2 only
c) Both 1 and 2 are correct
d) Neither 1 nor 2 are correct

15) Consider the following statement regarding Environment Education, Awareness and Training (EEAT)

- 1) It is a Central Sector scheme implemented by Ministry of Environment, Forest and Climate Change .
2) Objective is to promote environmental awareness and mobilize students' participation for environment conservation.

Which of the above statements is /are correct?

- a) 1 only
b) 2 only
c) Both 1 and 2 are correct
d) Neither 1 nor 2 are correct

16) Consider the following statement

- 1) Under this scheme more than 1 lakh Eco-clubs have been formed in schools and colleges to educate students and to spread awareness on environmental
2) A financial assistance of Rs 5,000/- per Eco-club used to be provided under this programme with a ceiling of 500 school Eco-clubs per district and 100 college Eco-clubs per State.

Which of the above statement is /are correct?

- a) 1 only
b) 2 only
c) Both 1 and 2 are correct
d) Neither 1 nor 2 are correct

17) Consider the following statement

- 1) Under National Nature Camping Programme (NNCP) scheme, organization of field visits/nature camps in different Protected Areas/Nature Parks/Tiger Reserves of the country for students were supported.
- 2) These camps provided 'nature experience' to students and had huge potential to trigger their sensitivity towards nature and its conservation

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

18) Consider the following statement

- 1) The Zonal Councils are the statutory bodies.
- 2) The idea of creation of Zonal Councils was mooted by the first Prime Minister of India, Pandit Jawahar Lal Nehru in 1956.

Which of the above statement is/are correct?

- a) 1 only
 - b) 2 only
 - c) Both 1 and 2 are correct
 - d) Neither 1 nor 2 are correct
- 1.

19) Identify the incorrect pair

- 1) Northern Zonal Council- Haryana
- 2) Central zonal council- Maharashtra
- 3) western zonal council- Rajasthan
- 4) eastern zonal council- west bengal

Choose the correct answer

- a) 1 and 2 only
 - b) 2 and 3 only
 - c) 3 and 4 only
 - d) 1 and 4 only
- Correct option is b

20) Consider the following statements regarding 7th Edition of India Water Impact Summit:

- 1) The Summit aims at giving an insight into the potential causes for divergence and formulating strategy to achieve convergence.
- 2) It is organised by NITI Aayog at Dr Ambedkar International Centre (DAIC), 15 Janpath, New Delhi.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

21) Consider the following statements

- 1) Finance forum is a special track that will bring together global financial institutions and investors interested in river restoration and

conservation programmes.

- 2) The 2022 summit, like earlier summits, will also provide an opportunity to dozens of technology and innovation companies from around the world that are keen to bring their solutions to India to address various issues and concerns pertinent to our river basins.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

22) Consider the following statements

- 1) The portal - "GHAR - Go Home and Re-Unite" will be a platform for information on children from every district to smoothen the process of their repatriation and restoration.
- 2) National Commission for Protection of Child Rights (NCPCR), has developed and launched this portal

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

23) consider the following statement

- 1) Juvenile Justice (Care and Protection of Children) Act, 2015 provides for protection of children in need of care and protection and those in conflict with law by catering to their basic needs through care, protection, development, treatment and social re-integration.
- 2) The Child Welfare Committees have been empowered to take decisions with regard to the children in need of care and protection for the best interest of the children

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

24) Consider the following statement

- 1) The main objective of the Krishi Udan Scheme 2.0 is to increase share of air carriage in the modal mix for transportation of Agri-produce, which includes horticulture, fishery, livestock and processed products.
- 2) The scheme assists farmers in transporting agriculture products so that it improves their value realisation.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct

d) Neither 1 nor 2 are correct

25) Consider the following statement

- 1) The Pradhan Mantri Surakshit Matritva Abhiyan has been launched by the Ministry of Health & Family Welfare (MoHFW), Government of India.
- 2) The program aims to provide assured, comprehensive and quality antenatal care, free of cost, universally to all pregnant women on the 9th of every month

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

26) Consider the following statement

- 1) The Ministry of Women and Child Development has formulated 'Mission Shakti', an Integrated Women Empowerment Programme, as Umbrella Scheme for the Safety, Security and Empowerment of Women for implementation during the 15th Finance Commission period.
- 2) It aims at strengthening interventions for safety, security and empowerment of women in a mission mode through institutional and convergence mechanism for greater efficiency, effectiveness and financial prudence

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

27) Consider the following statement

- 1) PM SVANidhi was launched by the Ministry of Housing and Urban Affairs on June 01, 2020
- 2) Its aim is to provide affordable Working Capital loan to street vendors to resume their livelihoods that have been adversely affected due to Covid-19 lockdown.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

28) consider the following statement

- 1) Government of India launched the "Scheme for Capacity Building in Textile Sector (SCBTS)" which is called SAMARTH, for the entire value chain of textiles except Spinning and Weaving in the organized sector,
- 2) It aims to promote skilling and skill upgradation in the traditional sectors of handlooms, handicrafts, sericulture and jute.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

29) Consider the following statement regarding Pradhan Mantri Awaas Yojana – Gramin

- 1) The main aim of the scheme is to provide pucca house with some of the basic amenities.
- 2) This scheme is meant for people who do not own a house and people who live in kutcha houses or houses which are severely damaged.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

30) Consider the following statement regarding Prashasan Gaon ki Ore' Campaign

- 1) It is a nationwide campaign under the Good Governance Week 2022.
- 2) The Nationwide campaign for Redressal of Public Grievances and Improving Service Delivery will be held in all Districts, States and Union Territories of the country

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

31) Consider the following statement

- 1) Indian Railways has indigenously developed an automatic train protection system rechristened as 'Kavach' (Train Collision Avoidance System),
- 2) It aims to prevent accidents due to human error resulting in Signal Passing at danger and over-speeding.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

32) Consider the following statement regarding Startup India Seed Fund Scheme (SISFS).

- 1) It aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market-entry, and commercialization.
- 2) Nodal Department is Department for Promotion of Industry and Internal Trade, under the Ministry of Commerce & Industry.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only

- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

33) consider the following statement

- 1) This is the first cohort of the NIRMAN Accelerator Program launched by Start-ups Incubation and Innovation Centre (SIIC) IIT Kanpur
- 2) To fast-track the growth of potential start-ups through rigorous mentoring and networking support in a short span through existing TBIs.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

34) Consider the following statement

- 1) The Department of Animal Husbandry and Dairying is implementing RGM for development and conservation of indigenous bovine breeds since December 2014.
- 2) The scheme is important for enhancing milk production and productivity of bovines to meet the growing demand of milk and making dairying more remunerative for the rural farmers of the country

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

35) Consider the following statement regarding swadesh darshan scheme

- 1) It is a central sector scheme
- 2) This scheme is envisioned to synergise with other schemes like Swachh Bharat Abhiyan, Skill India, Make in India etc. with the idea of positioning the tourism sector as a major engine for job creation, the driving force for economic growth, building synergy with various sectors to enable tourism to realise its potential

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

36) Consider the following statement

- 1) TULIP is a programme for providing internship opportunities to fresh graduates in all Urban Local Bodies (ULBs) and Smart Cities across the country.
- 2) The Ministry of Housing & Urban Affairs (MoHUA) in collaboration with the Ministry of Education (MoE) and All India Council of Technical Education (AICTE) has developed this programme

Which of the above statement is/ are correct?

- a) 1, only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

37) Consider the following statement regarding Ayushman Bharat Digital Mission

- 1) It aims to develop the backbone necessary to support the integrated digital health infrastructure of the country.
- 2) It will bridge the existing gap amongst different stakeholders of Healthcare ecosystem through digital highways.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

38) Consider the following statement regarding Pradhan Mantri Matsya Sampada Yojana (PMMSY)

- 1) PMMSY was launched in September 2020 with an aim to double the income of fish farmers and fishers in the country.
- 2) It focuses on sustainable development of India's fisheries sector and is a part of the Atmanirbhar Bharat scheme.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

39) Consider the following statement regarding AYURSWASTHYA Yojana?

- 1) It is a Central Sector Scheme.
- 2) The objective of the scheme is to support establishment of advanced/ specialized AYUSH medical health unit in reputed AYUSH and Allopathic institutions both in Government and Non-Government sector.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

40) Consider the following statement

- 1) ESG (Environmental, social, and corporate governance) is a term that has been coined to refer to specific data designed to be used by investors for evaluating the material risk that the organization is taking on based on the externalities it is generating
- 2) ESG reporting in India commenced in 2009 with the Ministry of Corporate Affairs (MCA)

issuing the Voluntary Guidelines on Corporate Social Responsibility

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

41) Consider the following statement

- 1) The Kepler- 138 c and d are made up of ingredients lighter than rock (rocky planets like Earth) but heavier than hydrogen or helium (gas-giant planets like Jupiter).
- 2) It is in the habitable zone, meaning it is located in an orbit that receives just the right amount of heat from its star to allow water to exist in a liquid form

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

42) Consider the following statement regarding The National Mobile Monitoring System (NMMS):

- 1) It was launched by the Ministry of Rural Development.
- 2) The NMMS App permits taking real-time attendance of workers at Mahatma Gandhi NREGS worksites along with geo-tagged photographs.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

43) Consider the following statement

- 1) Amrit Bharat Station scheme envisages development of stations on a continuous basis with a long term vision.
- 2) The scheme will subsume all previous redevelopment projects where work is yet to begin

Which of the above statement is are correct?

- a) 1 only
- b) 2only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

44) Consider the following statement regarding SEED programme

- 1) It was launched by the Ministry of Social Justice & Empowerment.
- 2) The objective of this component is to enable them to appear in competitive examinations/ admission to professional courses like medicine, engineering, MBA, etc. for obtaining an

appropriate job in the Public/Private Sector.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

45) Consider the following statement

- 1) The Law Commission of India, in its 114 Report, had suggested the establishment of Gram Nyayalayas
- 2) It aims to provide affordable and quick access to justice to the citizens at their doorsteps.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

46) Consider the following statement

- 1) Gram Nyayalayas or village courts are established under the Gram Nyayalayas Act, 2008
- 2) It aims to provide speedy and easy access to the justice system in the rural areas of India.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

47) Identify the tiger reserve associated with the given statement

- 1) It is located in the Nilgiris District of Tamil Nadu.
 - 2) It is at the tri-junction of three states, viz, Karnataka, Kerala and Tamil Nadu and it plays an unique role by forming part of the Nilgiris Biosphere Reserve
- a) Mudhumalai tiger reserve
 - b) Srivilliputhur tiger reserve
 - c) Mundanthurai tiger reserve
 - d) Agasthyamalai tiger reserve

48) Nilgiris Biosphere Reserve is the first Biosphere Reserve in India, declared in the year _____.

- a) 1985
- b) 1986
- c) 1987
- d) 1988

49) Consider the following statement

- 1) Cryomesh is a specially fabricated mesh used as substrate in cryopreservation.
- 2) It better preserves coral and has the properties of cryoplates

Which of the above statement is are correct?

- a) 1 only
- b) 2 only

- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

50) Consider the following statement

- 1) Corals are animals which live in a symbiotic relationship with microscopic algae called zooxanthellae (which live within the coral tissue).
- 2) The zooxanthellae convert sunlight into food, providing corals with up to 90 per cent of their energy needs. They also give corals much of their colour

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

51) Consider the following statement

- 1) The Tal Chhappar Sanctuary is known as the home of blackbuck and a variety of birds in Rajasthan.
- 2) The sanctuary is flanked by the Great India Desert, Thar and boasts a unique ecosystem and is an important birdwatching destination in India

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

52) Consider the following statement

- 1) Bullock heart tree's extracts have traditionally been used to cure conditions including dysentery and pediculosis (louse infestation)
- 2) Extracts from its leaves may be useful against three destructive pests

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

53) Consider the following statement

- 1) ICRISAT is a non-profit agricultural research organization.
- 2) It was founded in 1972 by a consortium of organizations convened by the Ford and the Rockefeller Foundations

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

54) Consider the following statement

- 1) Gold bonds are government securities denominated in grams of gold.
- 2) Investors have to pay the issue price in cash

and the bonds will be redeemed in cash on maturity.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

55) Consider the following statement

- 1) The Sun Temple, Modhera dedicated to Surya dev (The Sun God), is one of the remarkable gems of temple architecture in India.
- 2) It is an exemplary model of the Maru-gurjara architecture style of the 11th century of western India under the patronage of the Solanki dynasty. The age of the temple may be inferred from its style belonging to the reign of Bhimadeva I (1022-1063 CE)

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

56) Consider the following statement

- 1) The site of Unakoti Rock-cut relief sculptures is located in the north-eastern part of Tripura, which was built during 8th to 12th CE.
- 2) The vertical surface of the Unakoti hills was used by the ancient people to carve various mythological scenes such as the different iconographic forms of Siva, Ganesha, Uma-Maheshwaraw

Which of the above statement is are correct ?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

57) Consider the following statement

- 1) Vadnagar town is a multi-layered and multi-cultural mercantile settlement with its history stretching back to nearly 8th Century BCE.
- 2) Vadnagar was situated at a strategic location where two major ancient trade routes crossed each other.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

58) Hornbill festival is celebrated in

- a) Assam
- b) Meghalaya
- c) Nagaland
- d) Arunachal Pradesh

59) Consider the following statement

- 1) Dhokra is a form of ancient bell metal craft practiced by the Ojha metal smiths living in states like Jharkhand, Chhattisgarh, Odisha, West Bengal and Telangana.
- 2) But the style and also the workmanship of this artisan community varies in different states.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

60) Consider the following statement

- 1) Panini probably lived in the 4th century BC, the age of the conquests of Alexander and the founding of the Mauryan Empire, even though he has also been dated to the 6th century BC, the age of The Buddha and Mahavira.
- 2) 'Ashtadhyayi', or 'Eight Chapters', an ancient text written by the scholar Panini towards the end of the 4th century BC.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

61) Consider the following statement

- 1) Ramappa Temple, also known as the Rudreshwara temple, is a Kakatiya style Hindu temple dedicated to the god Shiva, located in Telangana.
- 2) The medieval Deccan Ramappa Temple which dates back to 1213 AD, was built by the patronage of the Kakatiya ruler Kakati Ganapathi Deva under the authority of his Chief Commander Rudra Samani

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

62) Consider the following statement

- 1) Dhanu Yatra is an annual drama-based open-air theatrical performance celebrated in Bargarh, Odisha.
- 2) It is considered the largest open-air theatre in the world. Spread over five square km, the entire town of Bargarh turns into a stage for the yatra

Which of the above statement is are correct?

- a) 1only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

63) Consider the following statement

- 1) Srimukhalingam Temple architectural masterpieces were created by the rulers of the Eastern Ganga dynasty in the then-capital of the Kalinga kingdom.
- 2) The Trinity of Madhukeswara, Someswara and Bheemeswara Temples are a testimony to the magnificent architectural skills of Kalinga Kings.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

64) Consider the following statement

- 1) A World Heritage Site is a location with an "outstanding universal value".
- 2) This signifies "cultural and/or natural significance which is so exceptional as to transcend national boundaries and be of common importance for present and future generations of all humanity"

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

65) Consider the following statement

- 1) ASW SWC Project is the Anti-Submarine Warfare Shallow Water Craft project under which many ships are being built for the Indian Navy
- 2) The ASW SWC ships will be capable of detecting and neutralizing various underwater threats.

Which of the above statement is/ are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

66) Consider the following statement

- 1) Vagirwas launched into water on November 12, 2020 and commenced sea trials on February 1, 2022.
- 2) It is having "superior stealth features" like advanced acoustic absorption techniques

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

67) Consider the following statement

- 1) INS Tarini is the second sailboat of Indian Navy after INSV Mhedi.
- 2) It is known for circumnavigating the globe with an all-women officer crew in the historic

expedition titled 'Navika Sagar Parikrama' in 2017.

which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

68) CORPAT is the naval exercise between india and _____

- a) Indonesia
- b) United States of America
- c) Russia
- d) France

69) Consider the following statement

- 1) Exercise Agni Warrior, is a bilateral exercise between the Singapore & Indian Army.
- 2) It involved showcasing joint firepower planning, execution and use of New Generation Equipment by the Artillery arm of both armies.

Which of the above statement is are correct

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

70) KAZIND-22 is the join military exercise between india and _____

- a) Kyrgyzstan
- b) Kazakhstan
- c) Egypt
- d) Saudi Arabia

71) Veer Guardian 23 is an military exercise between india and _____

- a) Japan
- b) United States of America
- c) United Kingdom
- d) France

72) Consider the following statement

- 1) The Smart Cities Mission won the award under the 'Data Sharing and Use for Socio-Economic Development' category.
- 2) The initiative is a key step in creating a robust data ecosystem that enables evidence-based decision-making in cities

Which of the above statements is /are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

73) Consider the following statement

- 1) Data smart Cities Initiative aims to harness the power of data for better governance in India's 100 Smart Cities.
- 2) It is based on a 'People, Platform, Process' strategy, which is helping in the convergence of the Ministry of Housing & Urban Affairs' efforts for performance management, empowerment of communities, and research, co-creation & open innovation.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

74) Exercise SURYA KIRAN is the military exercise between india and _____

- a) Nepal
- b) Bhutan
- c) Japan
- d) Indonesia

75) Consider the following statement

- 1) A carbon credit is a kind of tradable permit that, per United Nations standards, equals one tonne of carbon dioxide removed, reduced, or sequestered from the atmosphere.
- 2) Carbon allowances or caps, meanwhile, are determined by countries or governments according to their emission reduction targets.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

76) The Centre for Economics and Business Research (CEBR), a British consultancy, has said India will become third largest economy by _____

- a) 2035
- b) 2026
- c) 2050
- d) 2045

77) Consider the following statement

- 1) One of the leading stock exchanges in India – The National Stock Exchange of India (NSE) received in-principle approval from the capital markets regulator Securities Exchange Board of India (Sebi) to set up a Social Stock Exchange (SSE) as a separate segment.
- 2) An SSE allows the listing of non-profit or non-government organisations on stock exchanges, providing them with an alternative fund-raising structure

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct

d) Neither 1 nor 2 are correct

78) Consider the following statement

- 1) Green bonds are issued by companies, countries and multilateral organisations to exclusively fund projects that have positive environmental or climate benefits and provide investors with fixed income payments.
- 2) The projects can include renewable energy, clean transportation and green buildings, among others

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

79) Consider the following statement

- 1) The framework has 23 targets that the world needs to achieve by 2030.
- 2) The Global Environment Facility has been requested to establish a Special Trust Fund to support the implementation of the Global Biodiversity Framework (“GBF Fund”).

which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

80) Consider the following statement

- 1) The United Nations Charter established six main organs of the United Nations, including the UN Security Council (UNSC).
- 2) UNSC has the primary responsibility for the maintenance of international peace and security

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

81) Establishment of peacekeeping operations, Establishment of international sanctions and Authorization of military action through Security Council resolutions is the function of

- a) World bank
- b) United Nations security council
- c) World economic forum
- d) International monetary fund

82) Consider the following statement regarding ASEAN

- 1) It is a group of Association of Southeast Asian Nations, which was established in 1967 with the signing of the Bangkok declaration.
- 2) Founding members: Indonesia, Malaysia, Philippines, Singapore and Thailand.

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

83) Consider the following statement

- 1) Autism spectrum disorder (ASD) is a developmental disability caused by differences in the brain.
- 2) People with ASD may behave, communicate, interact, and learn in ways that are different from most other people

Which of the above statement is are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

84) _____ won its third World Cup title by beating France 4-2 in a penalty shootout.

- a) Portugal
- b) Morocco
- c) Argentina
- d) Italy

85) _____ becomes 6th-highest run scorer for India in ODIs

- a) M. S . Dhoni
- b) Rohit Sharma
- c) Sachin Tendulkar
- d) Ganguly

86) Disease Kala Azar is caused by

- a) Virus
- b) bacteria
- c) Parasite
- d) Fungi

87) Consider the following statement

- 1) A bomb cyclone is a mid-latitude storm in which the central pressure drops fast at one millibar per hour for at least 24 hours
- 2) This quickly increases the pressure difference, or gradient, between the two air masses, making the winds stronger.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

88) consider the following statements

- 1) Avian influenza or bird flu is a highly contagious viral disease caused by Influenza Type
- 2) A viruses which generally affects poultry birds such as chickens and turkeys

Which of the above statement is/are correct?

- a) 1 only

- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

89) consider the following statement

- 1) Blue light emission from GaN has been known for some time, and it is used in LEDs,
- 2) This is the first time that infrared light-matter interactions are demonstrated in GaN.

Which of the above statement is /are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

90) Consider the following statement

- 1) surface polariton are special modes of electromagnetic waves travelling at the interface of a conductor and an insulator such as air.
- 2) These are quasi-particles which have both light and matter characteristics.

Which of the statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

91) Consider the following statement regarding Gallium Nitride

- 1) It is a very hard and mechanically stable wide band gap (WBG) semiconductor, as it has a hexagonal crystal structure
- 2) It can be helpful in highly efficient infrared absorbers, emitters, and modulators that are useful in defence technologies, energy technologies, imaging, sensing.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

92) Consider the following statement

- 1) SpIN is India's first dedicated platform for innovation, curation, and venture development for the burgeoning space entrepreneurial ecosystem.
- 2) The tie-up is a one-of-a-kind public-private collaboration for start-ups and SMEs in the space industry.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

93) Natovenator polydontus is a _____ species

- a) Dinosaur
- b) Elephant

- c) Bird
- d) apes

94) Carbon Capture to Achieve Net Zero Emission Target by 2070 report is released by

- a) NITI Aayog
- b) World Bank
- c) IMF
- d) World economic forum

95) _____ ranks 22nd in Global Prime Cities Index

- a) Mumbai
- b) Delhi
- c) Chennai
- d) Pune

96) Consider the following statement

- 1) Gaganyaan is an Indian crewed orbital spacecraft that is intended to send 3 astronauts to space for a minimum of seven days by 2022 (delayed due to COVID-19).
- 2) It is launched by ISRO's Geosynchronous Satellite Launch Vehicle GSLV Mk III (3 stages heavy-lift vehicle).

Which of the above statement is /are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

97) Consider the following statement

- 1) The US National Aeronautics and Space Administration (NASA) and the French space agency Centre National d'Etudes Spatiales (CNES) have jointly launched the newest Surface Water and Ocean Topography (SWOT) spacecraft to track nearly all the water on the surface of the Earth
- 2) The Surface Water and Ocean Topography (SWOT) mission is a satellite altimeter jointly developed and operated by NASA and CNES (French space agency) in partnership with the space agencies of the UK and Canada.

Which of the above statement is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2 are correct
- d) Neither 1 nor 2 are correct

98) Identify the personality associate with the given statement

. He is known for his contribution to India's education system and his role in the Indian Independence movement.

He was given the title of 'Mahamana' or great soul by Mahatma Gandhi, who considered him as an elder brother

Choose the correct answer

- a) Madan Mohan malviya
- b) Sardar valabhai patel
- c) Lal bahadur sastri
- d) Jawaharlal Nehru

99) Who founded Banaras Hindu University (BHU) in the year 1916?

- a) Madan Mohan Malviya
- b) mahatma Gandhi
- c) muhamed Ali Jinnah
- d) motilal Nehru

100) identify the personality associated with the given statement

1) He attended as a volunteer in the 1906 Calcutta session of the Indian National Congress and formally joined the party in 1911.

2) In 1917, Mahatma Gandhi undertook the 'Champaran Satyagraha' and Dr. Prasad offered his whole-hearted support to the cause.

Choose the correct answer

- 1 only
- 2 only\Both 1 and 2 are correct
- Neither 1 nor 2 are correct

Answers:

1	c	21	c	41	c	61	c	81	b
2	c	22	c	42	c	62	c	82	c
3	c	23	c	43	c	63	c	83	c
4	c	24	c	44	c	64	c	84	c
5	d	25	c	45	c	65	c	85	b
6	c	26	c	46	c	66	c	86	c
7	b	27	c	47	a	67	c	87	c
8	a	28	c	48	b	68	a	88	c
9	c	29	c	49	c	69	c	89	c
10	c	30	c	50	c	70	b	90	c
11	c	31	c	51	c	71	a	91	c
12	c	32	c	52	c	72	c	92	c
13	c	33	c	53	c	73	c	93	a
14	c	34	c	54	c	74	a	94	a
15	c	35	c	55	c	75	c	95	a
16	c	36	c	56	c	76	a	96	c
17	c	37	c	57	c	77	c	97	c
18	c	38	c	58	c	78	c	98	a
19	b	39	c	59	c	79	c	99	a
20	c	40	c	60	c	80	c	100	c