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AN INITIATIVE BY
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Learn FINITE

The information in this magazine is intended to provide users with resources and information which they may find useful and of interest.

We take all reasonable steps to keep this information current and accurate, but errors can occur.

We express our gratitude to all our team members and thankful to all the advisors for making first step in publishing a small magazine.

Our Methodology for this Magazine

We have used official website pib.nic.in to collect important press release important for Exam

The topics has been categorised subject wise so that is is easy for aspirants to read in flow and relate the topics

Background information has been provided so static related to current can be covered

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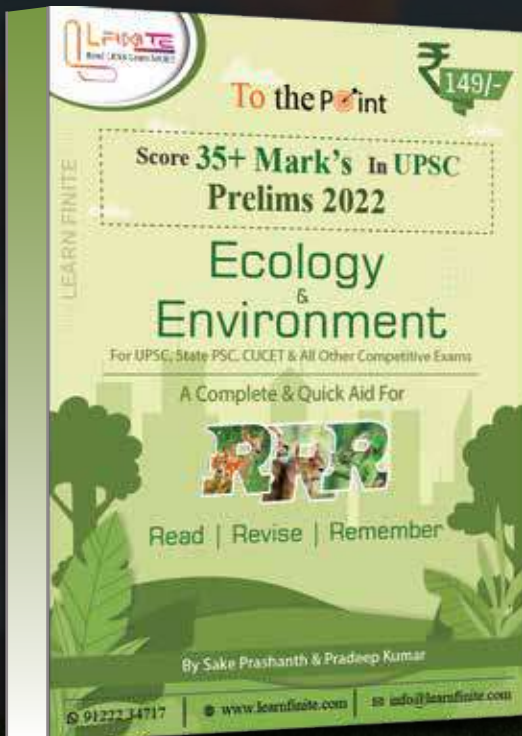
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An Initiative By Pradeep Kumar

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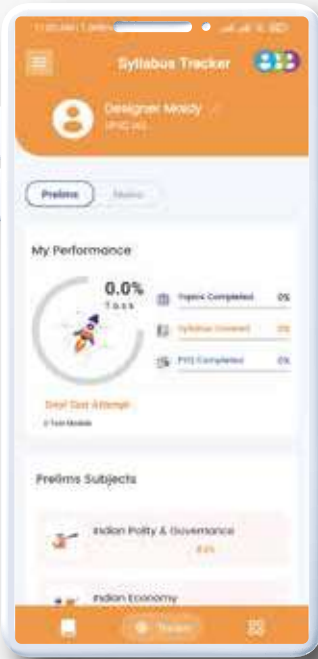
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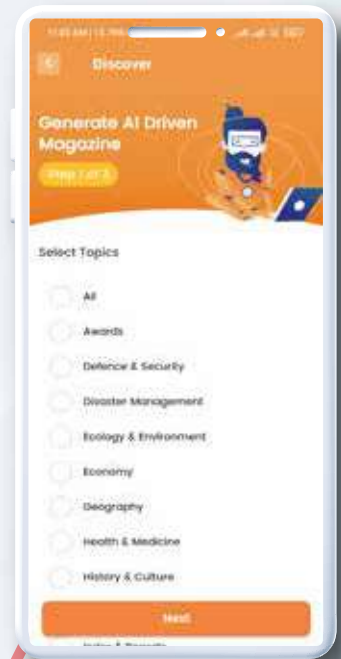
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History & Culture

Rath Yatra

In news

The Vice President, Shri M. Venkaiah Naidu has greeted the people on the eve of Rath Yatra.

About Rath Yatra

- Lord Jagannath's Puri Rath Yatra is one of the most revered and much-awaited festivals for devotees from Odisha and across India.
- It symbolizes our plural and inclusive ethos and holds immense spiritual significance for the participants.
- Truly signifying the name of Lord Jagannath – 'the Lord of Universe', the Yatra is unparalleled in its splendour and grandeur with magnificent 'Rathas' or chariots carrying the deities.
- As India and the rest of the world are passing through an unprecedented situation due to Covid-19, I appeal to everyone to celebrate Rath Yatra festival with the utmost care by adhering to Covid safety norms.

Festival

- The Hindu festival celebrates Lord Jagannath, Balabhadra, and Subhadra who are revered at the Jagannath Puri shrine. Lord Jagannath is a form of Vishnu.
- Ratha Yatra commemorates Lord Jagannath's annual visit to Gundicha Mata temple.
- It is said that to honour the devotion of Queen Gundicha, wife of the legendary King Indradyumna who built the Puri Jagannath temple, Lord Jagannath, Balabhadra, and Subhadra leave their regular abode in the main temple and spend a few days in this temple.
- After resting for eight days at Gundicha temple, **Lord Jagannath** returns to his main abode.
- This day is known as Bahuda Yatra where he returns and is observed on the eighth day after Ratha Yatra on Dashami Tithi.
- During Bahuda Yatra, the Lord makes a short stoppage at Mausī Maa temple which is dedicated to Goddess Ardhashini.

India's 39th World Heritage Site

In news

Rudreswara Temple (Ramappa Temple) at Palampet, Warangal, Telangana inscribed on UNESCO's World Heritage List.

About the temple

- Ramappa temple, a 13th century engineering marvel named after its architect, Ramappa, was proposed by the government as its only nomination for the UNESCO World Heritage site tag for the year 2019.
- The iconic Ramappa Temple showcases the outstanding craftsmanship of great Kakatiya dynasty.
- It is also known as the Ramappa temple, after the sculptor who executed the work in the temple for 40 years.
- The temple complexes of Kakatiyas have a distinct style, technology and decoration exhibiting the influence of the Kakatiyan sculptor.
- The Ramappa Temple is a manifestation of this and often stands as a testimonial to the Kakatiyan creative genius.
- The temple stands on a 6 feet high star-shaped platform with walls, pillars and ceilings adorned with intricate carvings that attest to the unique skill of the Kakatiyan sculptors.

- The sculptural art and decoration specific to the time and Kakatiyan Empire have an outstanding universal value.
- The distinct style of Kakatiyas for the gateways to temple complexes, unique only to this region confirm the highly evolved proportions of aesthetics in temple and town gateways in South India.
- The beauty of the temple mesmerized European merchants and travelers and one such traveler had remarked that the temple was the "brightest star in the galaxy of medieval temples of the Deccan".

Polity & Governance

World Intellectual Property Organization

In news

The World Intellectual Property Organization (WIPO), a specialized agency of the United Nations for brand protection across the world, has ordered a Delhi-based firm against using the domain name www.urbankhadi.com, which illegally uses the brand name "Khadi".

Details

- The Administrative Panel of WIPO's Arbitration and Mediation Center has ruled that the firm "Om Soft Solutions", owned by one Harsh Gaba, had registered and used the domain name www.urbankhadi.com in "bad faith" and to gain benefit from the goodwill of Khadi.
- The panel's order came on a petition of Khadi and Village Industries Commission (KVIC) against "Om Soft Solutions" which was indulging in the business of garments by misusing the brand name "Khadi".
- So far KVIC has issued legal notices to over 1000 private firms including Fabindia for misusing its brand name and selling products under the name of Khadi.

About WIPO

- The World Intellectual Property Organization (WIPO) is a specialized agency of the United Nations with 193 member states. The mission of WIPO is to develop a balanced and accessible international intellectual property (IP) system, which rewards creativity, stimulates innovation and contributes to economic development while safeguarding the public interest.
- The WIPO Convention established WIPO in 1967 with a mandate from its Member States to promote the protection of IP throughout the world through cooperation among states and in collaboration with other international organizations. Its headquarters are in Geneva & Switzerland. The Director General is Francis Gurry.
- India is a member of World Intellectual Property Organization a specialized agency of UN in the area of Intellectual Property. The nodal activities related to WIPO were transferred to this Department from Department of Higher Education in 2005.

SVAMITVA

In news

Minister of Panchayati Raj & Rural Development and Shri Kapil Moreshwar Patil, Minister of State for Panchayati Raj reviewed the progress made regarding implementation of SVAMITVA Scheme and e-Panchayat Programmes.

About the scheme

- **SVAMITVA Scheme** is a Central Sector scheme launched by Hon'ble Prime Minister of India on National Panchayat Day i.e 24th April 2020.
- In the States, the Revenue Department / Land Records Department will be the Nodal Department and shall carry out the scheme with support of State Panchayati Raj Department.
- Survey of India shall work as the technology partner for implementation.

Aim

The scheme aims to provide an integrated property validation solution for rural India. The demarcation of rural abadi areas would be done using Drone Surveying technology.

Significance

This would provide the 'record of rights' to village household owners possessing houses in inhabited rural areas in villages which, in turn, would enable them to use their property as a financial asset for taking loans and other financial benefits from Bank.

Way forward

With the upcoming 75th Independence Day Celebrations in 2022 (Azadi Ka Amrit Mahotsav), Minister of Panchayati Raj desired that the Gram Sabha meetings may be institutionalised, chalking out the broad level agendas/ focus areas of discussions in such meetings.

Article 340

In news

The Union Cabinet has approved the Eleventh Extension of the term of the Commission constituted under Article 340 of the Constitution to examine the issue of Sub-categorization within Other Backward Classes (OBCs) in the Central List by 6 months.

Significance

The proposed extension of tenure and addition in its terms of reference shall enable the "Commission" to submit a comprehensive report on the issue of sub-categorization of OBCs, after consultation with various stake holders.

Article 340

- The Draft Article 301 (Article 340) was debated and brought in the Constituent Assembly on 16th June in the year 1949
- This draft gave the President the power to appoint a Commission to investigate and execute the conditions of the backward classes.
- The President may by order appoint a Commission consisting of such persons as he thinks fit to investigate the conditions of socially and educationally backward classes within the territory of India and the difficulties under which they labour and to make recommendations.

State Commission for Protection of Child Rights

In news

State Commissions for Protection of Child Rights (SCPCR) have been set up in all the States and Union Territories except the two newly constituted UTs of Jammu & Kashmir and Ladakh.

Details

- As per Section 13 of the Commission for Protection of Child Rights Act, 2005, NCPCR has been mandated to take inquire into cases of violation of child rights and recommend initiation of proceedings in such cases.
- Regular follow-up is done for ensuring timely redressal of complaints.
- The Commission also conducts inspection visits and research studies, based on complaints received.

The National Commission for Protection of Child Rights (NCPCR)

- It was set up in March 2007 under the Commissions for Protection of Child Rights (CPCR) Act, 2005, an Act of Parliament (December 2005).
- National Commission for Protection of Child Rights (NCPCR) is a statutory body under the Commissions for Protection of Child Rights (CPCR) Act, 2005 under the administrative control of the Ministry of Women & Child Development, Government of India.

Juvenile Justice (Care and Protection of Children) Amendment Bill 2021

In news

The Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021, which seeks to amend the Juvenile Justice Act, 2015, was passed in the Rajya Sabha, today.

The issue with present Act

- Presently there are three categories (petty, serious and heinous) defined under the Act which are referred to, while considering the cases of children in conflict with law.
- However, it was observed that some of the offences do not strictly fall under any of these categories.
- It has been decided that offences where the maximum sentence is more than 7 years imprisonment but no minimum sentence has been prescribed or minimum sentence of less than 7 years is provided, shall be treated as serious offences within this Act.

Amendments

- The amendments include authorizing District Magistrate including Additional District Magistrate to issue adoption orders under Section 61 of the JJ Act, in order to ensure speedy disposal of cases and enhance accountability.
- The District Magistrates have been further empowered under the Act, to ensure its smooth implementation, as well as garner synergized efforts in favour of children in distress conditions.
- As per the amended provisions of the Act, any Child Care Institutions shall be registered after considering the recommendations of the District Magistrate.
- The DM shall independently evaluate the functioning of District Child Protection Units, Child Welfare Committees, Juvenile Justice Boards, Specialized Juvenile Police Units, Child care Institutions etc.
- The eligibility parameters for appointment of CWC members have been redefined. Criteria for disqualification of the CWC members has also been introduced to ensure that only the persons capable of rendering quality service with requisite competence and integrity are appointed to CWC.

Special Courts Under POCSO Act

In news

The Protection of Children from Sexual Offences (POCSO) Act, 2012 enacted by Govt of India provides safeguards for children against sexual abuse.

About the act

- The POCSO Act 2012 provides for establishment of Special Courts for ensuring speedy trial.
- Further, as per the Act, the evidence of the child shall be recorded within a period of thirty days of the Special Court taking cognizance of the offence and the Special Court shall complete the trial, as far as possible, within a period of one year from the date of taking cognizance of the offence.
- The Act was amended in 2019 to introduce more stringent punishment including death penalty for committing sexual crimes on children, with a view to deter the perpetrators & prevent such crimes against children.
- A centrally sponsored scheme for setting up of 1023 Fast Track Special Courts (FTSCs) including 389 Exclusive POCSO Courts is implemented by the Department of Justice (DoJ), for expeditious trial and disposal of rape and POCSO cases.

Economy

OECD/G20 Inclusive Framework tax deal

Context

Majority of the members OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (including India) adopted yesterday a high-level statement containing an outline of a consensus solution to address the tax challenges arising from the digitalisation of the economy.

In news

India joins OECD/G20 Inclusive Framework tax deal.

Components

- Pillar One which is about reallocation of additional share of profit to the market jurisdictions.
- Pillar Two consisting of minimum tax and subject to tax rules.

Issue

- Some significant issues including share of profit allocation and scope of subject to tax rules, remain open and need to be addressed.
- Further, the technical details of the proposal will be worked out in the coming months and a consensus agreement is expected by October.

Solution

- The principles underlying the solution vindicates India's stand for a greater share of profits for the markets, consideration of demand-side factors in profit allocation, the need to seriously address the issue of cross border profit shifting, and the need for subject to tax rule to stop treaty shopping.
- India is in favour of a consensus solution, which is simple to implement, and simple to comply.
- At the same time, the solution should result in allocation of meaningful and sustainable revenue to market jurisdictions, particularly for developing and emerging economies.
- India will continue to be constructively engaged for reaching a consensus-based ready to implement solution with Pillar one and Pillar two as a package by October and contribute positively for the advancement of the international tax agenda.

Matsya Setu

In news

Union Minister for Fisheries, Animal Husbandry and Dairying, launches the Online Course Mobile App “Matsya Setu” for Fish Farmers.

Details

- The ICAR-Central Institute of Freshwater Aquaculture (ICAR-CIFA), Bhubaneswar, developed the app with the funding support of the National Fisheries Development Board (NFDB), Hyderabad.
- The online course app aims to disseminate the latest freshwater aquaculture technologies to the aqua farmers of the country.
- **Matsya Setu** app has species-wise/ subject-wise self-learning online course modules, where renowned aquaculture experts explain the basic concepts and practical demonstrations on breeding, seed production and grow-out culture of commercially important fishes like carp, catfish, scampi, murrel, ornamental fish, pearl farming etc.

Significance

- The app will be surely helpful for the farmers to learn the advancements in the technologies and Better Management Practices at their convenience.
- Learning the advanced technologies will certainly influence the adoption of scientific methods in fish farming; hence the productivity will be enhanced, and the income will be improved.
- This app can also be an important tool to disseminate the latest information on different schemes among the stakeholders, especially fishers, fish farmers, youth and entrepreneurs across the country, assist them and facilitate ease of doing business.

Memorandum on Cooperation (MoC) b/w Competition Commission of India (CCI) and Japan Fair Trade Commission (JFTC)

In news

Cabinet approves Memorandum on Cooperation (MoC) between Competition Commission of India (CCI) and Japan Fair Trade Commission (JFTC)

Impact

- The approved MoC, through exchange of information, will enable CCI to emulate and learn from the experiences and lessons of its counterpart competition agency in Japan which would enhance efficiency.
- The same will help improve enforcement of the Competition Act, 2002 by CCI.
- The resultant outcomes will benefit consumers at large and will promote equity and inclusiveness.

Details

It will envisage to promote and strengthen cooperation in the matter of Competition Law and policy through exchange of information as well as through various capacity building initiatives in the areas of technical cooperation, experience sharing and enforcement cooperation

Background

Section 18 of the Competition Act, 2002 permits CCI to enter into any memorandum or arrangement with any agency of any foreign country for the purpose of discharging its duties or performing its functions under the Act.

Madurai Malli and other flowers exported to USA

In news

GI certified Madurai Malli and other flowers exported to USA & Dubai from Tamil Nadu.

Details

- The flowers for the consignments were sourced from Nilakottai, Dindigul and Sathyamangalam, Tamil Nadu by APEDA registered M/s.Vanguard Exports, Coimbatore.
- The exporters of consignments were supported by professors from floriculture department of Tamil Nadu Agriculture University, Coimbatore in adoption of packaging technology to increase the shelf life of the flowers.
- Direct contacts with the farmers to cultivate quality flowers were undertaken by the exporters and the initiative generated employment to about 130 women workers and about 30 skilled workers.
- Indian community in Dubai and USA would be able to offer fresh flowers to Hindu deities both at home and temples while celebrating religious and cultural festivals after exports of flowers from India continue at regular interval.

Export stats

During 2020-2021, fresh cut flowers jasmine flowers and bouquets (comprising of jasmine and other traditional flowers) valued at Rs 66.28 crores were exported to countries like USA, UAE, Singapore, etc. Out of which, value of Rs.11.84 crores were exported from Tamil Nadu region through major airports of Chennai, Coimbatore and Madurai.

About the flower

- Jasmine (*Jasminum Officinale*) is one of the most popular flowers found across the world.
- The scent of Jasmine is synonymous with the splendor of Madurai's Meenakshi temple, Madurai has emerged as a major market for the malligai grown in its neighbourhood, and has evolved into the 'jasmine capital' of India.

GIS Enabled Land Bank

In news

The India Industrial Land Bank (IILB) is a GIS-based portal - a one-stop repository of all industrial infrastructure-related information – connectivity, infra, natural resources & terrain, plot-level information on vacant plots, line of activity, and contact details.

Details

- Currently, the IILB has approximately 4000 industrial parks mapped across an area of 5.5 lakh hectare of land, serving as a decision support system for investors scouting for land remotely.
- The system has been integrated with industry-based GIS systems of 17 states to have details on the portal updated on a real-time basis and will achieve pan-India integration by December 2021.
- A mobile application (wherein login is not required) was launched on Android and iOS stores.
- Information on Land bank is also accessible via Homepage of the Department for Promotion of Industry and Internal Trade.

Stats

- The website has seen a 30% increase in page views each month since April 2021 and received 55000 page views in June compared to 44136 page views in May 2021 and 30153 page views in April 2021.

- In previous quarter (Apr – Jun 2021), total users were 13,610 out of which 12,996 were unique users with total page views of approximately 1.3 lakh.

Financial Market dialogue

In news

India and the United Kingdom (UK) held the inaugural meeting of the India-UK Financial Markets Dialogue ('the Dialogue') virtually.

- The Dialogue was established at the 10th Economic and Financial Dialogue (EFD) in October 2020 to deepen bilateral ties in the financial sector.
- Following the government-to-government discussion on these issues, private sector partners were invited to the discussion.
- The City of London Corporation's Capital Markets Working Group presented their work on the Indian corporate bond market, and the India-UK Financial Partnership presented their recommendations on the UK-India financial services relationship, particularly on development of GIFT City as global services hub.

Themes of discussion

- GIFT (Gujarat International Finance Tec-City) City, India's flagship international financial centre,
- banking and payments,
- insurance, and
- capital markets

Mango export footprint to newer countries

In news

India has expanded its footprint of mango exports to the newer countries this season, notwithstanding logistical challenges posed by the COVID19 pandemic.

Details

- In a major initiative that would boost mango export potential from the eastern region especially to middle east countries, a consignment of Geographical Identification (GI) certified Fazil mango variety sourced from Malda district of West Bengal was exported today to Bahrain.
- The consignment of Fazil mango was exported by APEDA registered DM enterprises, Kolkata and imported by Al Jazira Group, Bahrain.
- APEDA has been initiating measures to boost mango exports from non-traditional regions and states.
- It has been conducting virtual buyer-seller meets and festivals to promote mango exports.

Varieties of mango exported

The nine varieties which were exported includes GI certified *Khirsapati* (Malda, West Bengal), *Lakkhanbhog* (Malda, West Bengal), *Fazli*(Malda, West Bengal), *Dussheri*(Malihabad, Uttar Pradesh) and *Amrapali* and *Chausa* (Malda, West Bengal) and *Langda* (Nadiya, West Bengal).

Mango in India

- It is also referred to as 'king of fruits' and referred to as *Kalpavriksha* (wish granting tree) in ancient scriptures.
- While most of the states in India have mango plantations, Uttar Pradesh, Bihar, Andhra Pradesh, Telangana, Karnataka have a major share in total production of the fruit.
- *Alphonso*, *Kesar*, *Totapuri* and *Banganpalli* are leading export varieties from India.

- Mango exports primarily take place in three forms: fresh mango, mango pulp, and mango slice.

Socio-economic development of the entire North-Eastern

In news

Union Minister of Culture, Tourism, and Development of North-Eastern Region (DoNER) Shri G.Kishan Reddy reviewed various developmental activities and programmes going on in the North-Eastern Region.

Details

- Socio-economic development of the entire North-Eastern Region at a fast pace will be his key focus area.
- The transformation that took place in the North-Eastern Region in the last seven years in all spheres of life under the leadership of Prime Minister Narendra Modi is both incredible and unprecedented.
- North East region will emerge as one of the favourite tourism and business destinations of India.
- Peace in the North East is very important for the economic development, promotion of tourism and employment in the region.

About Ministry

- The Ministry of Development of North Eastern Region is responsible for the matters relating to the planning, execution and monitoring of development schemes and projects in the North Eastern Region.
- Its vision is to accelerate the pace of socio-economic development of the Region so that it may enjoy growth parity with the rest of the country.

First Private LNG Facility plant at Nagpur

In news

Minister for Road Transport and Highways Shri Nitin Gadkari has emphasized the importance of alternate biofuels for diversification of agriculture towards the energy and power sector.

Details

- Inaugurating the country's first Private LNG Facility plant at Nagpur today he said in our economy we are spending 8 lakh crores for the import of petrol diesel and petroleum products which is a big challenge.
- The Minister said we have designed a policy that encourages the development of imports substitute cost-effective pollution-free and indigenous ethanol, bio CNG, LNG, and hydrogen fuels.
- He said the ministry is constantly working on different alternative fuels.
- He said we have to use surplus in rice, corn and sugar to prevent it from going waste.

Liquefied Natural Gas (LNG)

- Liquefied natural gas (LNG) is natural gas that has been converted to a liquid form for the ease and safety of natural gas transport.
- Natural gas is cooled to approximately -260 F, creating a clear, colorless, and non-toxic liquid that can be transported from areas with a large supply of natural gas to areas that demand more natural gas.
- In its liquid state, natural gas takes up 1/600th of the space, meaning that natural gas is shrunk 600 times, making it much easier to ship and store when pipeline transport is not feasible.
- As world energy consumption increases, experts anticipate that the LNG trade will grow in importance.

APEDA inks MoU with NAFED

In news

APEDA inks MoU with NAFED for strengthening export linkage of Farmer Cooperatives & FPOs.

Details of MoU

- According to the MoU, the key areas of cooperation include facilitating APEDA registered exporters getting assistance under all the Govt. of India schemes implemented through NAFED.
- The MoU also envisages ensuring sustainability and growth of exports by Cooperatives by addressing issues such as technology, skill, quality products and market access.
- The collaborations between APEDA, which functions under Ministry of Commerce & NAFED, registered under the Multi State Co-operative Societies Act, also support engaging Cooperatives involved in agricultural production for improving the quality of agri-produce and its consolidation for better price realization to the farmers.
- APEDA would facilitate exports by the Cooperatives, FPO's, partners and associates identified and promoted by NAFED.
- APEDA and NAFED will also facilitate participation of Farmers' Cooperatives in global trade including B2B & B2C fairs to be organized in India and abroad and also to mutually cooperate in international business development & promotions.
- The MoU also entails providing assistance towards capacity building of Cooperative Societies, Self-Help Groups (SHGs) for their social & environmental compliances and skilling as per international standards.
- APEDA and NAFED have also agreed to work in close coordination towards sustainable Cluster development of the clusters in various States notified under Agri Export policy.

Trade Finance Services platform

In news

The International Financial Services Centres Authority (IFSCA) has been set up vide IFSCA Act, 2019 to develop and regulate the financial products, financial services and financial institutions in the International Financial Services Centres (IFSCs).

Reason

Towards this end, IFSCA has issued a framework for Setting up and operating International Trade Finance Services Platform ('ITFS') for providing Trade Finance Services at International Financial Services Centres ('IFSCs').

Significance

- The framework will enable Exporters and Importers to avail various types of trade finance facilities at competitive terms, for their international trade transactions through a dedicated electronic platform viz, ITFS.
- This will help in their ability to convert their trade receivables into liquid funds and to obtain short term funding.
- This framework will provide an opportunity to the participants to avail trade finance facilities for trade transactions such as Export Invoice Trade Financing, Reverse Trade Financing, Bill discounting under Letter of Credit, Supply Chain Finance for Exporters, Export Credit (Packing Credit), Insurance/ Credit Guarantee, Factoring and any other eligible product, on the ITFS platform.

100 Billion “Blue Economy”

In news

India Aims to Target over 100 Billion “**Blue Economy**” Through Deep Ocean Mission and Ocean Resources.

Details

- This could be a new avenue to supplement the country’s economy to the tune of an estimated Rs. 110 billion.
- “Deep Ocean Mission” planned by the Ministry of Earth Sciences will be carried out in collaboration with Indian Space Research Organisation(ISRO) and it will be a major step in the direction of integrating and bringing together the efforts of the different streams of science operating under different Ministries in the government.
- The Ministry carries out its research & development and operational activities under five major umbrella schemes.

Benefits

- It will also have far-reaching benefits for the common man.
- For example, it could help in providing clean drinking water and explore the avenues of desalination of water as well as extracting minerals from the ocean belt.

New Khadi Products

In news

Minister for MSME Shri Narayan Rane launched Khadi’s two new exclusive product range – Khadi cotton babywear and unique Khadi handmade paper slippers.

About the products

- The new products include Khadi’s first ever cotton clothing for babies.
- KVIC has used 100% hand-spun and handwoven cotton fabric that is soft on the tender and sensitive skin of the children and prevents them from any rashes or skin irritation.
- The ministers also launched Khadi’s handmade paper “use & throw” slippers which has been developed for the first time in India.
- These handmade paper slippers are 100% eco-friendly and cost-effective.
- The Handmade paper used in making these slippers is completely wood-free and made of natural fibres like Cotton & Silk rags and agro waste.
- These slippers are weightless and best suited for travel and indoor usage like in home, hotel rooms, hospitals, places of worship, laboratories, etc. It is also effective from the hygiene point of view.

The Khadi and Village Industries Commission

- KVIC is a statutory body established by an Act of Parliament.
- In April 1957, it took over the work of former All India Khadi and Village Industries Board.

Objective

- The social objective of providing employment.
- The economic objective of producing saleable articles.
- The wider objective of creating self-reliance amongst the poor and building up of a strong rural community spirit.

IBBI amends regulations for insolvency process

In news

The Insolvency and Bankruptcy Board of India (IBBI) has amended the Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Persons) Regulations.

Details

- A resolution professional is duty-bound to find out if a Corporate Debtor (CD) has been subject to avoidance transactions, namely, preferential transactions, undervalued transactions, extortionate credit transactions, fraudulent trading and wrongful trading, and file applications with the adjudicating authority seeking appropriate relief.
- As per the amendments, the resolution professional has to file Form CIRP 8 electronically on IBBI's platform, informing about his or her opinion related to avoidance transactions.
- CIRP stands for Corporate Insolvency Resolution Process.

The Insolvency and Bankruptcy Board of India

- It was established on 1st October, 2016 under the Insolvency and Bankruptcy Code, 2016 (Code).
- It is a key pillar of the ecosystem responsible for implementation of the Code that consolidates and amends the laws relating to reorganization and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximization of the value of assets of such persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders.

'Raja Mircha' from Nagaland

In news

'Raja Mircha' also referred as king chilli from Nagaland was today exported to London via Guwahati by air for the first time.

Details about the chilli

- Exporting fresh King Chilli posed a challenge because of its highly perishable nature.
- The consignment of King Chilli also considered as world's hottest based on the Scoville Heat Units (SHUs).
- The consignment was sourced from Tening, part of Peren district, Nagaland and was packed at APEDA assisted packhouse at Guwahati.
- The chilli from Nagaland is also referred as *Bhoot Jolokia* and *Ghost pepper*. **It got GI certification in 2008**
- Nagaland King Chilli belongs to genus *Capsicum* of family *Solanaceae*.
- Naga king chilli has been considered as the world's hottest chilli and is constantly on the top five in the list of the world's hottest chilies based on the SHUs.

APEDA

- APEDA in collaboration with the Nagaland State Agricultural Marketing Board (NSAMB), coordinated the first export consignment of fresh King Chilli.
- APEDA had coordinated with NSAMB in sending samples for laboratory testing in June and July 2021 and the results were encouraging as it is grown organically.
- APEDA would continue to focus on the north eastern region and has been carrying out promotional activities to bring the North-Eastern states on the export map.
- In 2021, APEDA has facilitated exports of Jackfruits from Tripura to London and Germany, Assam Lemon to London, Red rice of Assam to the United States and Leteku 'Burmese Grape' to Dubai

Science & Tech

Probing stellar evolution

In news

Rebel behavior of highest energy afterglow of a Gamma-Ray Burst detected in space may help probe stellar evolution

Highlights

- The emission from the most notable Gamma-Ray Burst (GRB) explosion so far traced -- the afterglow from a galaxy 4.5 billion light-years away was found to be complex in nature and did not follow the evolution expected in standard afterglow models.
- The detection of high energy photons (TeV Photons) from this GRB provides new insights and important clues to unravel the underlying physical processes at work which result in such explosions.
- The GRB with ultra-high energy photons called GRB 190114C was detected for the first time on 14-January-2019.
- The optical observations of the afterglow from GRB 190114C were carried out with the **Growth India Telescope (GIT), Himalayan Chandra Telescope (HCT)**
- Detailed modeling of the afterglow using multi-band data indicates that the parameters describing the fraction of energy in electron population and magnetic field are evolving with time and not constant as generally seen in GRBs.
- The scientists suggested that the evolution of these parameters, at early times, may play a role in producing the bright TeV emission.

AI and Emerging Technologies Centre of Excellence

In news

The Arun Jaitley National Institute of Financial Management (AJNIFM) and Microsoft signed a Memorandum of Understanding (MoU) for a strategic partnership to build an AI and emerging technologies Centre of Excellence at AJNIFM.

Working

- The collaboration seeks to explore the role of cloud, AI and emerging technologies for transforming and shaping the future of public finance management in India.
- The Centre of Excellence will serve as a central body for research, AI scenario envisioning and tech led innovation.
- AJNIFM and Microsoft will jointly explore use cases of emerging technologies in finance and related areas, across central and state ministries and public sector enterprises.
- Microsoft will partner closely with AJNIFM to define the future of public finance management in India, providing the technology, tools and resources to build a strong ecosystem of partners, upskill government officials and build thought leadership.
- Both organizations will also work closely on a capacity building program for senior government officials in associated ministries, departments and financial institutions.

- As part of this skilling effort, public sector officials will be trained on the application of emerging technologies in finance management to address potential risks like money laundering, use of machine learning models for decision making, role of responsible tech in finance, etc.

Area of focus

- **Building an innovation centre:** Joint development of a Centre of Excellence at AJNIFM to drive AI envisioning in finance management across key associated ministries of AJNIFM.
- **Industry thought leadership:** Microsoft and AJNIFM will jointly develop research papers and organize strategic knowledge sharing workshops with industry experts to discuss the role of cloud, data and AI for re-imagining public finance management in India.
- **Reskilling and capacity building:** Developers at AJNIFM and senior government officials from associated ministries will be skilled in data engineering, data sciences, AI and machine learning etc.
- **Creating a strong ecosystem of partners:** Engaging ecosystem partners, academia and MSMEs to drive innovation in financial management based on priority scenarios.

About AJNIFM

- The Arun Jaitley National Institute of Financial Management (AJNIFM) is a Centre of Excellence specialising in capacity building of professionals in the fields of Public Policy, Financial Management and other governance issues for promoting highest standards of professional competence and practice.
- AJNIFM was set up in 1993 as a registered society under Ministry of Finance, Government of India.
- AJNIFM plays a pivotal role in governance and administrative reforms by providing a platform for interaction and exchange of ideas and experiences among officers from different organized services, different state governments and between personnel of civil and defense establishments.
- AJNIFM has become a premier resource center to meet the training needs of Central Government for senior and middle level management.

About Microsoft India

Microsoft enables digital transformation for the era of an intelligent cloud and an intelligent edge. Its mission is to empower every person and every organization on the planet to achieve more. Microsoft set up its India operations in 1990.

Ease of Living

In news

Space Technology is being applied in diverse fields and sectors to bring **"Ease of Living"** for the common man.

Details

- ISRO is no longer confined only to the launching of satellites, but it has been constantly enlarging its role in development activities in the last seven years, thus contributing to Prime Minister Narendra Modi's mission of "Transforming India".
- There is the widespread application of Space Technology in fields like Agriculture, Soils, Water Resources, Land Use/Land Cover, Rural Development, Earth and Climate Studies, Geosciences, Urban & Infrastructure, Disaster Management Support, Forestry and Ecology, and Using Geospatial Technology as a tool for enabling Decision Support Systems.
- Space technology is now being used in diverse sectors including Railways, Roads and Bridges, Medical management/telemedicine, procurement of timely Utilization Certificates, disaster forecast, and management, etc.

- In agriculture, satellite-driven seasonal cropping patterns, experiments on yield estimation, estimation of net-sown crop area, and agricultural drought assessment studies are being conducted. Similarly, degradation maps were generated and useful for planning soil conservation/reclamation programs, land use planning, bringing additional areas into cultivation, and improving productivity levels in degraded lands.

Wealth from Waste

In news

Scientists have shown that the spent catalysts from the energy industry or the raw material for recycling operation that deliver fresh catalysts and valuable metals work as an efficient bifunctional oxygen electrocatalyst and can catalyze the core reactions that facilitate the operation of metal-air batteries.

Details

- It can help develop new strategies for effectively using industrial waste for energy storage in batteries paving the way to realize the dream of achieving 'today's waste is tomorrow's energy'.
- Hydrogen energy offers a promising power generation route for the industry and transport sectors due to high energy density and clean output.
- One of the ways to produce hydrogen is by catalytic decomposition of methane using nickel catalyst embedded on alumina or zeolite.
- After several runs, the catalysts get spent due to carbon choking and lose their activity.
- The spent catalysts are typically subjected to energy-intensive processes such as high-temperature combustion for recycling, releasing a large amount of CO_x into the atmosphere during the process or chemical treatment for the reclamation of metal constituents.
- These protocols are neither economically viable nor environmentally friendly, thus demanding alternative avenues to efficiently use the spent catalyst.
- One of the best possible routes is to use the retrieved spent catalyst for energy generation/storage applications.
- The composition of the given spent catalyst, Carbon nanotubes with Ni nanoparticles and porous alumina, may be ideal for direct use as electrocatalyst in electrochemical energy applications and thus, opens up a viable strategy for converting waste to wealth.

World's first database of genomic variants

In news

DBT-NIBMG creates world's first database of genomic variants of oral cancer

dbGENVOC

dbGENVOC is a browsable online database of GENomic Variants of Oral Cancer and is a free resource.

- ~24 million somatic and germline variants derived from whole exome sequences of 100 Indian oral cancer patients and whole genome sequences of 5 oral cancer patients from India,
- somatic variation data from 220 patient samples drawn from the USA and analyzed by TCGA-HNSCC project and
- manually curated variation data of 118 patients from recently published peer-reviewed publications. Variants were identified by the community approved best practice protocol and annotated using multiple analytic pipeline.

Details

- dbGENVOC is not just a catalogue of genomic variants, it has a built-in powerful search engine.
- It also allows a reasonable extent of statistical and bioinformatic analysis to be carried out online, including identifying variants in associated altered pathways in oral cancer.
- The repository, which will be updated annually with variation data from new oral cancer patients from different regions of India and southeast Asia, has the potential to support advances in oral cancer research and will be a major step in moving forward from simply cataloguing variants to gain insight into their significance.

Oral Cancer

- Oral cancer is the most prevalent form of cancer among men in India, largely fuelled by tobacco-chewing.
- Tobacco-chewing causes changes in the genetic material of cells in the oral cavity.
- These changes (mutations) precipitate oral cancer.
- Research to identify those genetic mutations that drive oral cancer are ongoing. Such driver mutations may be variable across populations

About DBT

The Department of Biotechnology (DBT), Ministry of Science and Technology, boosts and augments the development of the biotechnology ecosystem in India through its expansion and application in agriculture, healthcare, animal sciences, environment, and industry.

About NIBMG

The Government of India, under the aegis of the Department of Biotechnology, has established the National Institute of Biomedical Genomics (NIBMG) as an autonomous institution. This is the first institution in India explicitly devoted to research, training, translation & service and capacity-building in Biomedical Genomics. It is located in Kalyani, West Bengal, India, near Kolkata.

Meet organized by APEDA

In news

To promote agricultural crops exports and adherence to global practices, APEDA in collaboration with Farmer Producer Organizations (FPOs), traders, exporters, agricultural scientists, Uttar Pradesh government & other institutions today organized a meet at Varanasi.

Details

- More than 200 farmers from the Varanasi region participated in the meet where agricultural scientists and officials from the leading institutes provided valuable inputs for promoting agricultural products exports from the region as well as adherence to globally recognized Good Agricultural Practices (GAP) by farmers.
- Farmers were provided technical inputs on GAP implementation, ensuring pest-free cultivation, diseases identifications in fresh fruits & vegetables, plant quarantine, and strategy to boost the agri-exports from eastern Uttar Pradesh.
- A special session was organised on export of Banana, wherein the representative from APEDA registered exporter briefed participants about the banana processing.

Way forward

- APEDA is working very closely with all the stakeholders with the objective to export India's agricultural produce to the global market.

- A presentation was made on assistance provided by APEDA in boosting agri-exports from the Varanasi region.

Rare super luminous supernova

In news

An extremely bright, hydrogen deficient, fast-evolving supernova that shines with the energy borrowed from an exotic type of neutron star with an ultra-powerful magnetic field has been spotted by Indian researchers.

Significance

Deep study of such ancient spatial objects can help probe the mysteries of the early universe.

Supernova

- Such type of supernovae called Super Luminous Supernova (SLSNe) is very rare.
- This is because they are generally originated from very massive stars (the minimum mass limit is more than 25 times that of the Sun), and the number distribution of such massive stars in our galaxy or in nearby galaxies is sparse.
- The team observed it using special arrangements at India's recently commissioned Devasthal Optical Telescope (DOT-3.6m) along with two other Indian telescopes: Sampurnanand Telescope-1.04m and Himalayan Chandra Telescope-2.0m.
- They found that the outer layers of the onion structured Supernovae had been peeled off, and the core was shining with a borrowed energy source.

Promotion and Facilitation of Marine Resources

In news

Inter-Ministerial Cooperation for Promotion and Facilitation of Marine Resources in the field of Polar biology.

Aim

The MoU will be implemented with the aim to collaborate with in mutually agreed-upon thrust areas of research in the area of POLAR sciences.

Details

- Department of Biotechnology SIGNS Memorandum of Understanding (MoU) With Ministry of Earth Sciences To Set up DBT MOES Polar Research Centre.
- POLAR region encompassing the Antarctic, Arctic, Southern Ocean and the Himalayas being a unique ecosystem offers a huge amount of interest due to its extreme climate compare to the rest of the world.
- Although researchers across the globe have contributed to different areas of research, the **POLAR region is yet known as an unexplored ecosystem.**
- The MoU envisages mutual collaboration to explore the possibility of cooperation, convergence and synergy to bring out expertise and services of both the organizations under one roof and work hand-in-hand for addressing relevant questions in the field of polar biology.
- Particularly, biotechnological applications of polar microbes could be the centre point of this collaboration between both the Ministry of Earth Sciences and DBT.

Way forward

- In order to strengthen this association and expedite the research in the polar region joint laboratories will be set up at MOES stations.

- This will allow researchers to carry out the experiments on the site without the need for transporting the samples in the parent laboratories in India and will generate valuable information and novel products from these unique environments.

Behaviour of Intestinal Bacteria

In news

The mystery of how does the bacterial resident of the human intestine, the *E-coli* move towards or away from chemicals---a phenomenon called chemotaxis, has intrigued scientists for a long time.

Finding

- E.coli bacteria show chemotaxis in response to different chemicals present in human gastrointestinal tract.
- Scientists have now found the condition that is most suitable for getting the best chemotactic performance.
- The new finding will help track behavior of E-Coli bacteria in response to chemical signals. The response of E-Coli to chemicals in the intestine bacteria plays a crucial role in the functioning of the human intestine.
- Many organisms in nature respond to the chemical signal received from their environment by showing bodily motion or as chemotaxis.

Functioning of the signal in cell

- A sperm cell finds the ovum using chemotaxis. White blood cells that are needed for healing injuries find the site of injury or inflammation by chemotaxis.
- Butterflies also track flowers, and male insects reach their targets by using chemotaxis. Understanding chemotaxis involves how it is affected by various conditions present inside the cell or in the environment.
- E.coli uses its run-and-tumble motion to migrate towards the region with more nutrients.
- The nutrient molecules bind to the chemo-receptors present on the cell membrane, and this input signal is processed by the sensing module of the signaling network, finally modulating the run-and-tumble motion of the cell.
- The adaptation module of the signaling network ensures that the intracellular variables do not deviate too far from their average values.

High Strength Beta Titanium Alloy

In news

Defence Research and Development Organisation (DRDO) has indigenously developed a High Strength Metastable Beta Titanium Alloy containing Vanadium, Iron and Aluminium

Details

- Defence Metallurgical Research Laboratory (DMRL) has developed it, a premier Hyderabad based laboratory of DRDO.
- These alloys are already being used by many developed nations in recent times as beneficial substitute for the relatively heavier traditional Ni-Cr-Mo structural steels to achieve weight savings.
- The excellent forgeability of high strength-to-weight ratio Ti-10V-2Fe-3Al alloy facilitates manufacture of intricately configured components for aerospace applications with potential for significant weight savings

Features of Alloy

- Some of the components which may be forged from this alloy include slat/flap tracks, landing gear, and drop link in landing gear – among several others.

- The high strength beta titanium alloys are unique due to their higher strength, ductility, fatigue, and fracture toughness – making them increasingly attractive for aircraft structural applications.
- Furthermore, their relatively lower lifetime cost, owing to superior corrosion resistance in comparison to steels, is an effective trade-off to justify the use of this expensive material in India too.

Materials that self-repair

In news

The materials recently developed by scientists can repair their own mechanical damages with the electrical charges generated by the mechanical impact on them.

Details

- New materials may soon make it possible for damaged electronic components, such as in space crafts, to mend themselves.
- Piezoelectric molecular crystals is the new material that repair themselves from mechanical damages without need for any external intervention.
- Piezoelectric crystals are a class of materials that generate electricity when it undergoes a mechanical impact.
- The piezoelectric molecules developed by the scientists called bipyrzole organic crystals recombine following mechanical fracture without any external intervention, autonomously self-healing in milliseconds with crystallographic precision.
- In these molecular solids, due to the unique property of generating electrical charges on mechanical impact, the broken pieces acquire electrical charges at the crack junction, leading to attraction by damaged parts and precise autonomous repair.

I-STEM

In news

National web portal for sharing R&D facilities I-STEM enters Phase-II, five years extension approved by the Office of Principal Scientific Adviser to GOI.

Details

- The goal of I-STEM is to strengthen the R&D ecosystem of the country by connecting researchers with resources, in part by promoting technologies and scientific equipment development indigenously, and providing necessary supplies and supports to researchers by enabling them an access to existing publicly funded R&D facilities in the country through the I-STEM web portal.
- In the first phase, the portal is listed with more than 20,000 pieces of equipment from 1050 institutions across the country and has more than 20,000 Indian researchers.
- I-STEM portal facilitates researchers to access slots for the use of equipment, as well as to share the details of the outcomes, such as, patents, publications and technologies.

Phase II

- Under Phase II, the portal will host indigenous technology products listed through a digital catalogue.
- The portal will also provide a platform for the various City Knowledge and Innovation Clusters (<https://www.psa.gov.in/st-clusters>) supported by the Office of PSA to enhance effective use of R&D infrastructure through leveraging collaboration and partnership built on a shared STI ecosystem.
- It will also host and provide access to selected R&D software required to undertake research projects by students and scientists.

- The I-STEM portal in its new phase will be designed as a dynamic digital platform that will provide boost to research and innovation especially for 2 tier and 3 tier cities and also for the emerging start-up ecosystem.

Materials for energy storage & conservation

In news

Three compendiums collating information on ongoing research activities in the country related to hydrogen and fuel cell and materials for energy storage and conservation by scientists, industry, utilities, and other stakeholders from R&D laboratories and academia, were launched.

Details

- Greater utilization of renewables in our energy mix is India's policy objective to achieve de-carbonisation.
- While there are several pathways for de-carbonisation varying in time frames, hydrogen produced from renewables is considered as the cleanest energy source.
- Considering the importance of Hydrogen in the emerging landscape of clean energy, the Department of Science & Technology (DST) had already incubated a small R&D program few years ago to act as a pilot that can be scaled up according to national needs and priorities in future.

Material Discovery

- Materials are the foundation of every clean energy innovation: advanced batteries, solar cells, low energy semiconductors, thermal storage, coatings, and catalysts for the conversion, capture, and use of carbon dioxide.
- In short, new materials constitute one of the cornerstones for the global transition to a low-carbon future.
- The process of discovering and developing new materials currently entails considerable time, effort, and expense.
- Each newly discovered molecule is run through simulation, synthesis, and characterization, with synthetic procedures taking from 10 to 20 years at a very high cost.

Space Tourism

In news

The Nehru Science Centre, Mumbai in association with the Aeronautical Society of India organised an online lecture on 'Space Tourism: The Next Frontier'

Space Tourism

- Space tourism is space travel for recreational, leisure or business purposes.
- US billionaire Richard Branson started space Adventures was the first agency in the field of Space Tourism, The agency in 1998.
- Dennis Tito was the first commercial spaceflight passenger before which only astronauts went to space for research purposes.
- The basic terminologies involved in space tourism are orbital flights, sub orbital flights, low earth orbits.

Orbit

An orbit is a curved path that an object in space (such as a star, planet, moon, asteroid or spacecraft) takes around another object due to gravity.

Types of orbit

- **Low Earth Orbit (LEO)**

LEO is commonly used for communication and remote sensing satellite systems, as well as the International Space Station (ISS) and Hubble Space Telescope.

- **Medium Earth Orbit**

MEO is commonly used for navigation systems, including the U.S. Global Positioning System (GPS).

- **Geosynchronous Orbit (GSO) & Geostationary Orbit (GEO)**

Objects in GSO have an orbital speed that matches the Earth's rotation, yielding a consistent position over a single longitude. GEO is a kind of GSO. It matches the planet's rotation, but GEO objects only orbit Earth's equator, and from the ground perspective, they appear in a fixed position in the sky. GSO and GEO are used for telecommunications and Earth observation.

- **Polar Orbit**

Within 30 degrees of the Earth's poles, the polar orbit is used for satellites providing reconnaissance, weather tracking, measuring atmospheric conditions, and long-term Earth observation.

- **Sun-Synchronous Orbit (SSO)**

A type of polar orbit, SSO objects are synchronous with the sun, such that they pass over an Earth region at the same local time every day.

- **Highly Elliptical Orbit (HEO)**

An HEO is oblong, with one end nearer the Earth and other more distant. Satellites in HEO are suited for communications, satellite radio, remote sensing and other applications.

Biotech-PRIDE

In news

Biotech-PRIDE (Promotion of Research and Innovation through Data Exchange) Guidelines" developed by Department of Biotechnology (DBT), Ministry of Science and Technology was released by the union minister.

Aim

It aim at providing a well-defined framework and guiding principle to facilitate and enable sharing and exchange of biological knowledge, information and data and is specifically applicable to high-throughput, high-volume data generated by research groups across the country.

Details

- The Minister also launched the website of Indian Biological Data Centre, IBDC.
- India ranks number 4 amongst the top 20 countries contributing biological databases¹.
- The Government invests a large amount of public funds to generate data in various sectors, including in the biosciences for knowledge generation, to gain deep insights into intricate biological mechanisms and other processes and for translation.

Significance

- The Biotech PRIDE Guidelines will facilitate this and enable exchange of information to promote research and innovation in different research groups across the country.
- These guidelines will ensure data sharing benefits viz. maximizing use, avoiding duplication, maximized integration, ownership information, better decision-making and equity of access.
- These guidelines are the enabling mechanism for sharing the data publicly and within a reasonable period of time after data-generation, thus the utility of the data will be maximal.
- The PRIDE Guidelines will be helpful to harmonize, synergize and encourage the data sharing for research and analysis in the country and to promote scientific work and foster progress by building on previous work.
- These guidelines will also be advantageous in avoiding duplication and wasteful expenditure of resources on research.

Reversing motion of bacteria

In news

In a recent study, Indian Scientists have found a theoretical model explaining a unique kind of motion called direction reversing active motion exhibited by some bacteria that feed on other microorganisms.

Details of the study

- This analysis can help in building more efficient artificial micro and nano-motors used in drug delivery and bio-imaging using the concept to incorporate a reverse gear.
- Bacteria move by propelling themselves with a velocity that changes direction randomly, which is called active motion.
- Besides bacterial motion, this kind of motion is found in living systems ranging from cell motility at the microscopic scale to the flocking of birds and fish schools at the macroscopic scale as well as in artificial systems including granular matter self-catalytic swimmers, and nano-motors.
- It forms an important sub-set of the ubiquitous nonequilibrium systems, for which no general theoretical framework exists.
- Some microorganisms, such as predator bacteria *Myxococcus Xanthus* and saprotrophic bacteria *Pseudomonas putida*, exhibit a unique kind of reversing active motion, whereby, in addition to a diffusive change of direction, the motion also completely reverses its direction intermittently.
- However, very little has been understood theoretically about the statistical properties of such motion.

Health & Medicine

MoU between India and Myanmar in the field of health research

In news

Cabinet approves MoU between India and Myanmar in the field of health research.

Objective

- Elimination of infectious diseases (to be decided mutually)
- Development of network platform of emerging and viral infections
- Training /capacity-building in research methodology management, clinical trials, ethics etc.
- Harmonization of regulatory mechanism.

Highlights

- The commitment of funds for workshops/meetings and research projects will be decided from time to time as per the funds available at that time.
- The Parties shall establish a Joint Working Group (JWG) consisting of delegates from each organization.
- JWG sessions shall be held alternatively in India and in Myanmar.
- The expenses related to travel, including visa entry, accommodation, per diem, health insurance, local transportation of its JWG members, shall be borne by the Sending Party whereas the organizational expenses of the JWG meetings shall be borne by the Host Party.

CTRI Portal

In news

CTRI Portal was launched online by Ayush Minister Shri Kiren Rijiju

Details

- This Ayurveda Dataset of CTRI has been jointly developed by ICMR and CCRAS, Ministry of Ayush.
- The Minister will also launch four more Portals, all developed by the Central Council for Research in Ayurvedic Sciences (CCRAS).
- CTRI is a primary register of Clinical Trials under WHO's International Clinical Trials Registry Platform (ICTRP) and the creation of Ayurveda dataset in CTRI facilitates usages of Ayurveda terminologies to record clinical study metadata based on Ayurveda interventions.
- Until now the clinical trials in Ayurveda were dependent on terminology borrowed from modern medicine.

Key Features

Provision of selection of the Ayurveda Health conditions from drop-down of 3866 Ayurveda morbidity codes incorporated from the NAMASTE portal (a portal developed by the AYUSH Ministry) in which morbidity statistics pertaining to Ayurveda has been classified according to International Classification of Diseases standards. It means, now the information, results etc. of Ayurveda Clinical Trials will be available in Ayurvedic vocabulary in the clinical trials registry of India.

Why is the Clinical Registry important?

- Clinical trials are being done continuously in the world for new drug discovery, treatment of diseases etc.
- The problem is that the results of these tests are not publicly available and due to this there is a possibility of not having accurate information about the trials.
- In view of this, the World Health Organization made it mandatory to create an online registry of clinical trials.
- In India this work is being done through CTRI and this registry is also part of the World Health Organization registry.

Way Forward

- The four more portals that will also be launched tomorrow are AMAR, SAHI, e-MEDHA and RMIS.
- All of these are primarily developed by CCRAS while RMIS is a collaborative effort of ICMR and CCRAS.

Supervised mindfulness meditation benefits

In news

Supervised mindfulness meditation benefits patients with Mild Cognitive Impairment & early Alzheimer's disease.

About the study and disease

- Mild Cognitive Impairment & early form of Alzheimer's is a condition in which memory deteriorates, but a person remains functionally independent.
- Among several treatment options, meditation is one non-invasive and cost-effective approach to bring relief to such patients.
- The study concludes that mindfulness meditation has potential in the modulation of brain regions concerned with attention, emotion, stress-response, and behavior which also impact other body functions such as heart, blood circulation, and metabolism.

- Further, a rigorous mindfulness-based intervention program has the potential to improve or stabilize cognitive functioning as well as the quality of life among patients suffering from MCI and early Alzheimer's disease.

Two phased study

- Dr. Ramshekhar N Menon conducted a two-phased study with separate objectives for each phase.
- The first phase was designed to explore neural correlations of mindfulness and study regions of brain activation enhancements among seasoned mindfulness practitioners and healthy non-practitioners through Imaging Biomarkers, which is the first of its kind multimodality imaging work in dementia from India.
- The second phase was planned to verify the changes in cognitive performance of patients with MCI before and after mindfulness training. The team carried out cognitive retraining weekly for 1 hour and provided feedback on the performance of the retraining tasks at the end of each session.
- The patients were given home-based tasks for practicing during the rest of the days.
- They also developed a 10 Weeks mindfulness meditation-based program for patients called the 'Mindfulness Unified Cognitive Behaviour Therapy (MUCBT)' training program.

Results

- The results of initial resting-state fMRI indicated that compared to age-matched healthy subjects who did no form of meditation practice in their routine lifestyle, mindfulness practitioners establish increased connectivity, based on resting-state brain activity in medial prefrontal cortex and right anterior insula, regions of the brain which are concerned with emotion, stress response, attention as well as response of an individual to environmental stimuli and behavior.
- The results of second phase suggest that mindfulness can activate neural correlates coupled with cognition, especially attention, behavior, stress response, and reaction or adaptation to the environment, among other functions, and it suggests that consistent practice of mindfulness can mediate internal as well as external awareness and can subserve psychological and cognitive health.

Indian part of WHO advisory committee on human genome editing

In news

Indian stem cell and developmental biologist Prof. Maneesha S Inamdar has been part of the WHO Expert Advisory Committee on Developing Global Standards for Governance and Oversight of Human Genome Editing.

Details

- It released two new companion reports providing the first global recommendations to help ensure that human genome editing is used for public health, with an emphasis on safety, effectiveness, and ethics.
- Professor Maneesha S Inamdar, along with her group, is conducting research at the Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru, an autonomous Institute of the Department of Science and Technology (DST) that uses gene-editing tools to manipulate stem cells in vitro.
- This can generate disease models for scientific insight into human development and devising therapeutic strategies.
- She pioneered human embryonic stem cell derivation and use in India and has contributed significantly to national and international stem cell guidance documents, ethics committees, and training programs.
- As part of the WHO Committee, she contributed scientific knowledge and perspective to provide guidance, expertise and support throughout the project for the conceptualization and development of the WHO Governance Framework and Recommendations on Human Genome Editing.
- She is a member of the Education, Engagement, and Empowerment (3E) subgroup of the Committee, and as part of the committee.

- She was also involved in making recommendations to the Secretariat and WHO Director-General on global governance structures for human genome editing, considering the relevant broader issues associated with oversight and governance of emerging technologies.

MoU signed between ITRA and Government of Gujarat

In news

An MoU was signed between Institute of Teaching and Research in Ayurveda (ITRA) under Ministry of Ayush and the Government of Gujarat.

Significance

- Through this MoU all the institutions functioning in the Ayurveda campus in Jamnagar have been brought under the umbrella of ITRA, the only institution under the Ministry of Ayush that has been accorded the status of Institute of National Importance (INI).
- Underlining the importance of the MoU, Shri Nitin Bhai said that this will pave the way of the strengthening of the education system in all branches of Ayurveda.
- This arrangement will result, in due course, in the opening of new doors in the fields of education, research and medicine.
- It is hoped that in the field of Ayurveda, it will be easier to prepare new teaching, medical and research methods and the study-research process will be intensified, expanding the overall scope of Ayurveda education and research.

Ecology & Environment

Premature mortality

In news

Black Carbon has a significant adverse effect on human health and leads to premature mortality, says a new study.

Issue

- The Indo-Gangetic plain is exposed to black carbon (BC) with serious implications on regional climate and human health.
- However, most of the pollution-based epidemiological studies essentially relate exposure to particulate mass concentration (PM 10 and/or PM 2.5) that invariably generalize all particulates with equal toxicity without distinguishing individuals by its source and composition, which genuinely have different health consequences.

Significance

- The study could help in the estimation of the future burden of mortality associated with air pollutants more accurately.
- The Indo-Gangetic plain is exposed to black carbon (BC) with serious implications on regional climate and human health.
- Importantly, the health effects in terms of mortality due to BC aerosol exposure have never been evaluated in India.

- A typical urban pollution hotspot in central Indo-Gangetic Plain (IGP), the town experiences very high aerosol loading and trace gas concentrations throughout the year due to the prevalence of a subsidence zone and observed decadal increasing trends both in Aerosol Optical Depth and Black Carbon aerosols.

Black Carbon

- Black carbon, or soot, is part of fine particulate air pollution (PM_{2.5}) and contributes to climate change.
- Black carbon is formed by the incomplete combustion of fossil fuels, wood and other fuels.
- Complete combustion would turn all carbon in the fuel into carbon dioxide (CO₂), but combustion is never complete and CO₂, carbon monoxide, volatile organic compounds, and organic carbon and black carbon particles are all formed in the process.
- The complex mixture of particulate matter resulting from incomplete combustion is often referred to as soot.

Study on social behaviour of Male Asian elephants

Context

- As human-elephant conflicts increase with time and expanding human range, understanding social behaviour becomes crucial to the conservation and management of the highly social and endangered Asian elephant.
- The Asian elephant is a charismatic species with a long history of co-existence with humans. Yet works on male societies of wild elephants based on long-term observations are rare.

In news

Researchers from Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), an autonomous Institute of the Department of Science and Technology, Government of India, studied associations of male Asian elephants by collecting and analysing data on behaviour of identified nonmusth wild Asian elephants of Nagarhole and Bandipur National Parks.

Finding of the research

- They found that the time spent by male Asian elephants in all-male and mixed-sex groups depended on the age of the male.
- Adult Asian male elephants preferred to spend their time alone than in mixed-sex or in all-male groups. Besides, old males were found mostly in the company of their age peers and less frequently with young males (15 to 30 years of age).
- Also, young males did not disproportionately initiate associations with old males.
- Adult male Asian elephants are less social than females. They enter musth -- a mate-searching strategy for old (above 30 years of age) males, annually.
- The researchers hypothesised that when the adult males enter musth, dominance relationships may affect the number of mating opportunities they procure.
- It might be more crucial for old males than for young males to test strength with each other and settle dominance relationships during their nonmusth time.

The genome of a Salt-secreting Mangrove Species

In news

Scientists have reported for the first time a reference-grade whole genome sequence of a highly salt-tolerant and salt-secreting true-mangrove species, *Avicennia marina*.

Mangroves

- Mangroves are a unique group of species found in marshy intertidal estuarine regions and survive a high degree of salinity through several adaptive mechanisms.
- Mangroves are important resources for the coastal region and are of great ecological and economic value. They form a link between marine and terrestrial ecosystems, protect shorelines, provide habitat for a diverse array of terrestrial organisms.

About the species

- *Avicennia marina* is one of the most prominent mangroves species found in all mangrove formations in India.
- It is a salt-secreting and extraordinarily salt-tolerant mangrove species that grows optimally in 75% seawater and tolerates >250‰ seawater.

The study

- This study employed the latest genome sequencing and assembling technologies and identified 31,477 protein-coding genes and a “salinome” consisting of 3246 salinity-responsive genes and homologs of 614 experimentally validated salinity tolerance genes.
- The study reported identification of 614 genes, including 159 transcription factors, which are homologous to the genes that were functionally validated for salinity tolerance in transgenic systems.

Green Sohra Afforestation Campaign

In news

Union Home Minister Shri Amit Shah launched the Green Sohra Afforestation Campaign at Sohra (Cherrapunji), he also inaugurated the Greater Sohra Water Supply Scheme

About the Campaign

- The Meghalaya Government with the help of Assam Rifles will run this afforestation campaign, this will greatly benefit eco-tourism and will also boost tourism in the state.
- Trees are cut for fuel and other uses, so 80% of the total land will be planted with traditional and long lifespan trees, the remaining 20% will be used for animal feed, ornamental plants and nursery which will meet all the requirements and help reduce the felling of long lifespan trees.
- With this technique, multi-level farming is done and the forest grows 30 times faster and after 3 years it becomes free of maintenance. Shri Shah said eco-tourism will be greatly benefited by this, besides tourism of Meghalaya will also get a boost.

Study on Water Scarcity

In news

Water being a State subject, steps for augmentation, conservation and efficient management of water resources are primarily undertaken by the respective State Governments.

Details of the study

- In order to supplement the efforts of the State Governments, Central Government provides technical and financial assistance to them through various schemes and programmes.
- Central Water Commission (CWC) has carried out the study “Reassessment of Water Availability in India using Space Inputs” in 2019.

- As per the study, the average annual water resources of the 20 basins of the country has been assessed as 1999.20 Billion Cubic Meters (BCM).
- The average annual water availability of any region or country is largely dependent upon hydro-meteorological and geological factors.
- Water Extraction is more than Annual Extractable Ground Water Resource.
- 270 units have been categorized as 'Critical', 1057 units as 'Semi-Critical', 4427 units as 'Safe' and 97 units as 'Saline'.

International Relation

MoU between India and Nepal in the field of Health Research

In news

Cabinet approves MoU between India and Nepal in the field of Health Research.

Objective

The objectives of this MOU are collaboration on joint research activities of mutual interest such as cross-border health issues, Ayurveda/traditional medicine and medicinal plants, climate change and health, non-communicable diseases, mental Health, Population-based cancer registry, tropical diseases (Vector-borne diseases such as Dengue, Chikungunya, malaria, JE, etc.), Influenza, Clinical Trial Registry, health research ethics, Capacity building through exchange of knowledge, skills tools and fellows and Collaboration for the adoption of tools, guidelines, protocols and best practices related to health research.

Details

- Each Party shall fund the components of the research approved under this MoU to be conducted in their country or may apply jointly for third-party funding.
- For the exchange of scientists under approved collaborative projects, the sending Party shall bear the cost of travel of visiting scientists whereas the receiving Party will provide the accommodation and living expenses of the scientist/researcher.
- The commitment of funds for workshops/meetings and research projects may be decided from time to time as per the funds available at that time.
- Arrangements to implement and execute all these activities shall be agreed to by the Parties prior to commencement of the activity.

MoU between India and Republic of The Gambia

In news

Cabinet approves Memorandum of Understanding signed between India and Republic of The Gambia on Refurbishing Personnel Administration and Governance Reforms.

Impact

The MoU will help in understanding the personnel administration of both the countries and enable in improving the system of governance through replicating, adapting, and innovating some of the best practices and processes.

Financial implications

- Each country will be responsible for its expenditure in connection with the implementation of this MoU.
- The actual amount of expenditure will depend on the activities that may be undertaken under the MoU.

Details

- Improving Performance Management System in Government.
- Implementation of contributory Pension Scheme
- E-recruitment in Government

Objective

The main objective of the MoU is to strengthen and promote bilateral cooperation between the two countries in Personnel Administration and Governance Reforms, as this will facilitate a dialogue between Indian Government agencies and the agencies of the Republic of the Gambia.

More so, Gambia is keen to engage with India to promote cooperation in areas such as Improving Performance Management System in Government, Implementation of Contributory Pension Scheme and, e-Recruitment in Government.

Significance

The MoU with the Republic of the Gambia will provide a legal framework to the cooperation between the two countries in Refurbishing Personnel Administration and Governance Reforms so as to improve upon the existing system of governance by learning, sharing and exchanging administrative experiences in the area of Personnel Administration and Governance Reforms and instill a greater sense of responsiveness, accountability and transparency.

Background

Government of India has taken up a goal of quantum shift in delivery of Government Services across the country and also aims to further Government's efforts at revamping of Personnel Administration and Governance Reforms which is relevant in the context of the goal of 'Minimum Government with Maximum Governance'.

INS SARVEKSHAK DEPARTS COLOMBO

In news

Indian Navy's Hydrographic Survey Ship Sarvekshak successfully completed survey action around the site of ill-fated MV X-Press Pearl on 02 July and handed over the survey data to the Sri Lankan authorities.

Details

- The ship equipped with the state of the art survey equipment including the Side Scan Sonar, was deployed on 25 June at the request of Government of Sri Lanka.
- The survey operations in three search areas around the wreck was progressed in coordination with Sri Lanka Navy and Sri Lanka's National Aquatic Resources Research and Development Agency (NARA).
- The ship undertook a total of 807 miles of Side Scan Sonar survey and identified 54 prominent underwater debris from MV X-Press Pearl and also one additional uncharted wreck.

Significance

The survey of the wreckage area would facilitate issuance of advisory to both mariners and fishermen, and subsequent removal of debris by Sri Lankan authorities, thereby ensuring safety of navigation for marine traffic operating through Colombo port.

INS Sarvekshak

- INS Sarvekshak, is based at Southern Naval Command at Kochi and is fitted with state-of-the-art survey equipment like Deep Sea Multibeam echo sounder system, Side Scan Sonar, Sound Velocity Profilers, and a fully automated digital surveying and processing system.
- In addition, the ship carries a Chetak helicopter which was extensively deployed during the survey for aerial reconnaissance.
- In the past, INS Sarvekshak has also undertaken foreign cooperation surveys in Sri Lanka, Mauritius, Seychelles, Tanzania and Kenya.
- India and Sri Lanka share a strong bond and partnership, and this survey operation undertaken has been another milestone in strengthening cooperation and understanding between the two countries and reinforcing the shared values.

Technical and Vocational Education and Training (TVET)

In news

Education Ministers from the five BRICS countries virtually signed a joint declaration today, with the resolve to further strengthen their academic and research collaboration in higher education and Technical and Vocational Education and Training (TVET)

Theme

In the 8th meeting of BRICS education Ministers that was held as part of the 13th BRICS Summit being hosted by India, ministers deliberated on two themes - ***Leveraging digital and technological solutions for ensuring inclusive and equitable quality education and enhancing research and academic collaboration.***

Details

- Regarding the need to leverage digital and technological solutions for ensuring quality inclusive education, the member states agreed to generate and expand their knowledge base that would help formulate initiatives in this regard.
- They also agreed to facilitate creation of mechanisms that would allow sharing of knowledge and best practices with each other. These could include seminars, policy dialogues, interactions with experts, to name a few.
- The BRICS Education Ministers also shared the policies and initiatives that each country launched to mitigate the effects of the Covid 19 pandemic on education.
- Speaking for India Shri Dhotre informed about our initiatives under PM eVidya for providing access to quality education through multi-modal means.
- He spoke of SWAYAM MOOCs platform, SWAYAM PRABHA TV Channels, DIKSHA, Virtual labs.

1320MW Maitree Power project

In news

Secretary (Power) Govt of India met Secretary (Power) Govt of Bangladesh today through video conferencing for the issues related to 1320MW Maitree Power project.

Participants

Senior officials including the officials from Ministry of Power (MoP), Ministry of External Affairs (MEA), High Commissioner of India in Bangladesh, Department of Heavy Industries (DHI), Central Electricity Authority (CEA), NTPC Ltd. BHEL and BIFPCL, attended the meeting.

Highlights

- This meeting was convened shortly after the 8th High Level Monitoring Committee meeting held on 17.06.2021 during which certain critical issues were identified that required to be addressed for timely commissioning of unit#1 in December 2021.
- The project is an environmentally friendly supercritical technology based thermal power plant, and the first unit of this project would be commissioned in December'2021 i.e. coinciding with Golden Jubilee celebration of Victory Day of Bangladesh and Unit#2 is expected to be commissioned matching with the implementation of associated transmission system.

Maitree Power project

- The Maitree super thermal power project is a 1,320MW coal-fired power station under construction in Rampal, Bangladesh.
- Bangladesh India Friendship Power Company (BIFPCL), a 50:50 joint venture between India's state-run National Thermal Power Corporation (NTPC) and Bangladesh Power Development Board (BPDB), is developing the power plant.
- Construction on the Rampal power plant was started in 2017 with commissioning expected by 2022.
- It will be one of the biggest coal-fired power plants in Bangladesh, along with the Payra Power Plant in Pataukhali that commenced test production in January 2020.

Personnel Management and Public Administration

In news

India and Singapore held meeting on the subject of "Personnel Management and Public Administration".

Participants

Shri Sanjay Singh, Secretary, DARPG from Indian side and Mr. Loh Khum Yean, Permanent Secretary, PSD, Singapore from Singapore side, led the bilateral meeting.

Details

- During the meeting, both sides shared experiences on Good Governance Practices in a Pandemic, Transforming Leaderships and Ethics, Capacity Building and Training of Leaders and Public Officers, Citizen Centric Governance and identified Citizen-centric service delivery and E-governance as potential areas for future collaboration.
- Since the scope of cooperation laid down under the MoU is immensely relevant to the processes of development in both countries, both sides' decided to share the best practices on current technology tools and processes of governance, capacity building, service delivery, etc. so that both the nations could benefit through cross-learning.

India and Gambia sign an MoU

In news

India and Gambia sign an MoU for strengthening and promoting bilateral cooperation between the two countries in Personnel Administration and Governance Reform.

Aim

The MoU aims at strengthening and promoting bilateral cooperation between the two countries in Personnel Administration and Governance Reforms.

Details

- The MoU was signed by Shri Sanjay Singh, Secretary on behalf of the Department of Administrative Reforms and Public Grievances and H.E. Mr. Lamin E. Singhateh, Charge d’Affairs on behalf of the Public Service Commission of the Gambia.
- The cooperation in areas such as Improving Performance Management System in Government, Implementation of contributory Pension Scheme and, e-Recruitment in Government form part of the areas to be covered under the activities of MoU.
- It was mutually decided that towards formation of Work Plan, a meeting of Joint Working Group would be held soon.

Gambia-India relations

- The Gambia-India relations refers to the international relations that exist between The Gambia and India.
- The Gambia maintains a High Commission in New Delhi.
- The Embassy of India in Dakar, Senegal is concurrently accredited to The Gambia, the only Anglophone country accredited to that mission.
- India also maintains an Honorary Consulate General in Banjul.

MoU between Institute of Cost Accountants of India (ICoAI) and the Association of Chartered Certified Accountants (ACCA), United Kingdom (UK)

In news

Cabinet approves Memorandum of Understanding (MoU) between Institute of Cost Accountants of India (ICoAI) and the Association of Chartered Certified Accountants (ACCA), United Kingdom (UK).

Significance

- It will provide mutual advanced entry to the Members of both the Institutes through exemptions from appearing in majority of papers to acquire the qualification of the other Professional Body and to undertake joint research, continuing professional development activities.
- This MoU will lead to a focus attention towards exchange of knowledge and exchange of research and publications which will strengthen good governance practice in both jurisdictions.
- Both parties will initiate joint research relevant to Cost Accountancy profession which could involve collaborative research in technical areas.
- This MoU will facilitate the movement of professionals in both jurisdictions and will enhance the employability of Cost Accountants in India and abroad.

Details

This MoU will provide a pathway to enable members of one Institute to seek full membership status of other Institute by successfully passing the minimum number of subjects of professional level and to facilitate the movement of professionals in both jurisdictions.

Background

- The Institute of Cost Accountants of India was first established in 1944 as a registered company under the Companies Act with the objectives of promoting, regulating and developing the profession of cost accountancy.
- On 28th May, 1959, the Institute was established by a special act of Parliament, namely, the Cost and Works Accountants Act, 1959 as a statutory professional body for the regulation of the profession of cost and works accountancy.

- The Institute is the only recognised statutory professional organisation and licensing body in India specialising exclusively in cost and works accountancy.
- The Association of Chartered Certified Accountants (ACCA) founded in 1904 and incorporated by Royal Charter in 1947 under the laws of England and Wales, is the global body for professional accountants, with more than 2,27,000 fully qualified members and 5,44,000 future members worldwide.

Rail Cargo movement between India and Nepal

In news

Rail Transportation between India & Nepal got a major boost today with coming into force of authorization to all cargo train operators to utilize the Indian railway network to carry all containers bound for Nepal whether bilateral freight between Indian and Nepal or third country freight from Indian ports to Nepal.

Significance

- This liberalization will allow market forces to come up in the rail freight segment in Nepal, and is likely to increase efficiency and cost- competitiveness, eventually benefiting the Nepalese consumer.
- The signing of this LoE marks another milestone in India's efforts to enhance regional connectivity under the "Neighbourhood First" policy.

Details

- These cargo train Operators include public and private container trains Operators, automobile freight train operators, special freight train operators or any other operator authorized by Indian Railways.
- India and Nepal sign a Letter of Exchange (LoE) to the India-Nepal Rail Services Agreement (RSA) 2004.

Rail Services Agreement (RSA) – 2004 and LoE.

- The Rail Services Agreement was executed on 21.05.2004 between Ministry of Railways, Government of India and Ministry of Industry, Commerce & Supplies (now Ministry of Commerce), His Majesty's Government of Nepal (now Govt. of Nepal) for introduction of freight train services between these two countries to and from Birgunj (Nepal) via Raxaul (India).
- This is an agreement which guides movement between India and Nepal by rail.
- The rationale for this Agreement is that there was no rail movement prior to this between the two countries and hence a framework was required for operational and commercial aspects and procedure for customs clearances for rail bound cargo.
- Since then large various developments have taken place which require changes to the Rail Services Agreement.

21st Session of India-Italy Joint Commission

In news

21st Session of India-Italy Joint Commission for Economic Cooperation.

Area of discussion

- Both sides held extensive discussions on bilateral trade and Investment and economic cooperation in the areas of Food Processing, Textiles, Leather, Railways, Start-ups and promotion of SMEs which play crucial role in economic growth and employment generation.
- The bilateral market access issues and non-tariff barriers were also discussed to facilitate trade and investment.
- The progress on the outcomes of India-EU leaders Summit in Porto, Portugal was also reviewed.

- Indian side also raised the issues of Mutual recognition of COWIN Vaccine Certificate and opening up of Travel restrictions, longer duration of Business Visas and Portability of social security benefits of Indians working in Italy.
- Following the India-Italy JCEC G2G Meeting, a G2B Session focusing on Energy partnership was held virtually in the presence of the two Ministers.

KVIC Secures Trademark Registrations

In news

Khadi and Village Industries Commission (KVIC) has recently secured trademark registrations in three countries – Bhutan, UAE and Mexico – a big stride towards protecting the identity of brand “Khadi” globally.

Details

- Apart from these countries, KVIC’s trademark applications are pending in 40 countries across the world that include the USA, Qatar, Sri Lanka, Japan, Italy, Australia, New Zealand, Singapore, Brazil and others.
- So far KVIC was having Trademark registrations for the word mark “KHADI” in 6 countries namely Germany, UK, Australia, Russia, China and EU where trademark registrations were granted in certain classes.
- However, with recent trademark registrations in Bhutan, UAE and Mexico, the number of such countries has gone up to nine.
- It is for the first time in the history of KVIC that sustained efforts have been made in the last 5 years to protect the brand “Khadi” which was given to us by none other than Mahatma Gandhi.

Timelines

- While KVIC obtained the latest trademark registration in Bhutan on 9th July; trademark registration was granted in UAE on 28th June.
- With this, KVIC has succeeded in securing trademark registration for the first time in a Gulf country. Earlier, KVIC got the trademark registration for “Khadi” in Mexico in December 2020.

BHIM–UPI in Bhutan

In news

Finance Minister Smt Nirmala Sitharaman and Finance Minister of Bhutan Mr Lyonpo Namgay Tshering jointly launch BHIM–UPI in Bhutan.

Details

- Launch fulfils the commitment made by two countries during Prime Minister of India’s State visit to Bhutan in 2019.
- BHIM UPI is one of the brightest spot and an achievement for digital transactions in India during the time of COVID-19 pandemic with more than 100 million UPI QRs have been created in last 5 years and BHIM UPI in 2020-21 has processed 22 billion transactions worth value Rs 41 lakh crore.
- This launch fulfils the commitment made by the two countries during the Hon’ble Prime Minister of India’s State visit to Bhutan in 2019.
- India and Bhutan have already enabled inter-operability in acceptance of Rupay cards in each other’s countries in two phases – acceptance of Rupay cards issued in India at Bhutan based terminals in the first phase, and vice versa in the second phase.
- Bhutan is the first country to adopt UPI standards for its QR deployment, and the first country in our immediate neighbourhood to accept mobile based payments through the BHIM App.

BHIM UPI

Bharat Interface for Money (**BHIM**) is a payment app that lets you make simple, easy and quick transactions using Unified Payments Interface (**UPI**). You can make direct bank payments to anyone on **UPI** using their **UPI** ID or scanning their QR with the **BHIM** app. You can also request money through the app from a **UPI** ID.

MoU between India and Russian Federation

In news

Cabinet approves Memorandum of Understanding (MoU) between India and Russian Federation on cooperation regarding coking Coal, which is used for Steel making.

Objective

The objectives of the MoU is to strengthen cooperation between Govt. of India and Govt of Russia in the steel sector. The activities involved in the cooperation are aimed at diversifying source of coking coal.

Benefits

- The MoU shall benefit the entire steel sector by reducing their input cost. This may lead to reduction in cost of steel in the country and promote equity and inclusiveness.
- The MoU will provide an institutional mechanism for co-operation in the coking coal sector between India and Russia.

Coking Coal

- Coking coal, also known as metallurgical coal, is used to create coke, one of the key irreplaceable inputs for the production of steel.
- There are many varieties of coal in the world, ranging from brown coal or lignite to anthracite.
- The property that really sets coking coals apart from other coals is its caking ability, which is the specific property required in order to make coke suitable for steel making.

MoU between India and Kingdom of Denmark

In news

Cabinet approves Memorandum of Understanding (MoU) between India and Kingdom of Denmark on Cooperation in the field of Health and Medicine

Benefits

- The bilateral Memorandum of Understanding will encourage cooperation between the Ministry of Health and Family Welfare of the Republic of India and the Ministry of Health of the Kingdom of Denmark through joint initiatives and technology development in the health sector.
- It will strengthen bilateral ties between India and Denmark.
- The bilateral Memorandum of Understanding shall encourage cooperation between the Ministry of Health and Family Welfare of the Republic of India and the Ministry of Health of the Kingdom of Denmark through joint initiatives and development of research in the health sector.
- This will facilitate in improving the public health status of the people of both the countries.

India Denmark Relations

- Pandit Jawaharlal Nehru's visit to Denmark in 1957 laid the foundation for a friendly relationship between India and Denmark that has endured ever since.

- The bilateral relations between India and Denmark are cordial and friendly, based on synergies in political, economic, academic and research fields.
- There have been periodic high level visits between the two countries.

7th BRICS Labour & Employment Ministers' Meeting

In news

Union Minister for Labour & Employment Bhupender Yadav chairs 7th BRICS Labour & Employment Ministers' Meeting.

Details

- Ministers of the member countries viz. Brazil, Russia, India, China and South Africa participated in the meeting.
- Discussion on four priority areas of cooperation took place namely, Promoting Social Security Agreements amongst BRICS Nations; Formalisation of Labour Markets; Participation of Women in the Labour Force; and Gig and Platform Workers: Role in the Labour Market.
- BRICS Ministers have resolved to carry out exchange of information among BRICS countries on employment and social security for cross-border labour flows and initiate social security agreements between BRICS nations within a reasonable time frame.
- To enhance the role of gig and platform workers in the labour market, the BRICS Ministers supported the development of the digital economy, including digital delivery of services, while acknowledging the role of digital platforms in providing resilience to national economies in the face of crisis such as COVID-19.

Labour laws

- The Code on Wages 2019
- The Code on Social Security 2020
- The Industrial Relations Code 2020
- The Occupational Safety, Health and Working Conditions Code 2020
- The new Labour Codes provide integrated pathways towards robust formalization of the labour market, increasing participation of women in the labour force and enhancing the role of gig and platform workers in the labour market.
- The Minister further emphasised on need for signing of Social Security agreements amongst BRICS nations to promote welfare of the international migrant workers.

Schemes & Policies, Social Issues

Loan Guarantee Scheme for Covid Affected Sectors

In news

Cabinet approves Loan Guarantee Scheme for Covid Affected Sectors (LGSCAS) and to enhance the corpus of Emergency Credit Line Guarantee Scheme (ECLGS).

Targets

LGSCAS: The Scheme would be applicable to all eligible loans sanctioned up to 31.03.2022, or till an amount of Rs. 50,000 crore is sanctioned, whichever is earlier.

ECLGS: It is a continuing scheme. The Scheme would be applicable to all eligible loans sanctioned under Guaranteed Emergency Credit Line (GECL) till 30.09.2021, or till an amount of rupees four lakh fifty thousand crore is sanctioned under the GECL, whichever is earlier.

Impact

- The LGSCAS has been formulated as a specific response to an exceptional situation the country has witnessed due to lack of adequate health infrastructure in the light of second wave of Covid-19.
- The approved scheme is expected to help the country in shoring up its much-needed healthcare infrastructure along with creating more employment opportunities.
- The main objective of LGSCAS is to partially mitigate credit risk (primarily construction risk) and facilitate bank credit at lower rates of interest.
- **ECLGS** is a continuing scheme and recently, on account of the disruptions caused by the second wave of COVID 19 pandemic to businesses across various sectors of the economy, the Government has further enlarged the scope of ECLGS.
- The enhancement is expected to provide much-needed relief to various sectors of the economy by incentivizing lending institutions to provide additional credit of up to Rs. 1.5 lakh crore at low cost, thereby enabling business enterprises to meet their operational liabilities and continue their businesses.

Background

LGSCAS

- The government has taken various measures to combat the crisis caused due to Covid-19 pandemic which has been upended by the second wave of COVID-19.
- The proposed LGSCAS is aimed at upscaling the medical infrastructure in the country, specifically targeting underserved areas.
- LGSCAS would provide a guarantee of 50 percent for brownfield projects and 75 per cent to greenfield projects for loans sanctioned up to Rs.100 crore, set up at urban or rural locations other than 8 Metropolitan Tier 1 cities (Class X cities).
- For aspirational districts, the guarantee cover for both brownfield expansion and greenfield projects shall be 75%.

ECLGS

- The design of ECLGS provides flexibility to quickly respond to emerging needs, as has been evidenced by the introduction of ECLGS 2.0, 3.0 and 4.0 as well as changes announced on 30.05.2021, all of which were within available headroom of Rs 3 lakh crore.
- Currently, about Rs. 2.6 lakh crore of loans have been sanctioned under ECLGS.
- A further uptick is expected due to changes announced recently, extension of limit of one time restructuring to Rs. 50 crore by RBI on 04.06.2021 and the continuing adverse impact of COVID on businesses.

Language strengthens culture, culture strengthens society

In news

Culture and traditions can be protected only if we preserve our languages.

Details

- According to UN report, one language in the world becomes extinct every two weeks, there are 196 Indian languages that are currently endangered.
- To preserve our languages, the medium of education should be in the mother tongue up to primary and secondary education.

- Conservation of nature is integral to Indian culture, evident from our worship of trees, rivers, wildlife, and cattle.
- Similarly, Indian values view the world as one family and that we must not forget our ancient philosophy of 'share and care'.
- Religious and spiritual leaders must reach out to the people and help them overcome this stress.
- Diversity in language is the foundation of a great civilization and that our civilisational values expressed themselves through its languages, music, arts, sports, and festivals. 'Political boundaries might change, but our mother tongue and our roots won't change'.
- It is important to preserve one's own language and tradition, it is equally important to respect the language and culture of others.

Project BOLD to Boost Tribals

In news

Khadi and Village Industries Commission (KVIC) have initiated a unique scientific exercise serving the combined national objectives of reducing desertification and providing livelihood and multi-disciplinary rural industry support.

Details

- The project named "Bamboo Oasis on Lands in Drought" (BOLD) is the first of its kind exercise in India which was launched today from the tribal village NichlaMandwa in Udaipur, Rajasthan.
- 5000 saplings of special bamboo species – BambusaTulda and BambusaPolymorpha specially brought from Assam – have been planted over 25 bigha (16 acres approx) of vacant arid Gram Panchayat land.
- KVIC has thus created a world record of planting the highest number of bamboo saplings on a single day at one location.
- The initiative has been launched as part of KVIC's "Khadi Bamboo Festival" to celebrate 75 years of independence "**Azadi ka Amrit Mahotsav**".
- KVIC is set to replicate the Project at Village Dholera in Ahmedabad district in Gujarat and Leh-Ladakh region by August this year.
- Total 15,000 bamboo saplings will be planted before August 21.

Why Bamboos?

- KVIC has judiciously chosen bamboo for developing green patches. Bamboos grow very fast and in about three years' time, they could be harvested.
- Bamboos are also known for conserving water and reducing evaporation of water from the land surface, which is an important feature in arid and drought-prone regions.

AIM-iLEAP

In news

Atal Innovation Mission concludes first fintech cohort of 'AIM-iLEAP' as a major step to accelerate Tech Start-ups across India

Details

- The fintech cohort was done through a series of thematic virtual demo days organized AIM in partnership with Startup Réseau and Visa as part of AIM-iLEAP (Innovative leadership for entrepreneurial agility and profitability) initiative.
- The program had kickstarted with the inaugural four-day Bootcamp for "FinTech" start-ups (the chosen few from among the several AIM-supported Fintech start-ups) from 14th to 17th June 2021.

- The Fin-Tech cohort consisted of start-ups from a wide range of areas such as- payments, international money transfers, personal finance, consumer banking, insurance, neo bank etc.
- In the Bootcamp they got an opportunity to fine-tune their pitches, work on their GTM strategy, understand more about the fintech ecosystem, ask questions to sectoral experts and so on.
- As per the AIM's mission, AIM-iLEAP bootcamp and demo day is the first among the many more to come initiatives to push startups in the country. Future cohorts shall be focussed on different sectors such as Agri-tech, Defence Tech, Smart Mobility, AI and so on.
- It is AIM's main objective to culminate into reality the vision of an Indian innovation ecosystem that runs sustainably on an auto-pilot mode.

Draft Drone Rules, 2021

In news

The Union civil aviation ministry released the draft of the national drone policy, making it significantly easier for people and companies to own and operate drones.

Key highlights

- The draft Drone Rules, 2021, will replace the Unmanned Aircraft System (UAS) Rules, 2021, which were issued on March 12, 2021.
- The draft Drone Rules, 2021, will offer safety features such as geo-fencing, real-time tracking beacon. A six-month lead time will be given for compliance.
- The draft Drone Rules, 2021, will provide an interactive airspace map with yellow, green, and red zones that will be displayed on the Digital Sky platform. The yellow zone has been reduced from 45 km to 12 km from the nearby airport perimeter. In the green zone, no flight permission will be required up to 400 ft and up to 200 ft in the area between 8 and 12 km from the airport perimeter.

Significance

- According to the draft Drone Rules 2021, operating drones without unique identification number will not be allowed, unless exempted.
- Drone operators will have to generate a unique identification number of a drone by providing requisite details on the digital sky platform.
- The draft Drone Rules 2021 also have safety features such real-time tracking beacon, and Geo-fencing, which are expected to be notified in future and a six-month lead time will be provided for compliance.

Digital sky platform

- Digital sky platform will also be developed as a business-friendly single-window online system with minimal human interference and most permissions will be self-generated.
- Digital Sky platform is an initiative by the Ministry of Civil Aviation (MoCA) that offers a secure and scalable platform to support drone technology frameworks such as NPNT (No Permission, No Take-off), provide flight permission digitally, and manage unmanned aircraft operations and traffic in an efficient manner.

Special livestock sector package

In news

Government approves implementation of a special livestock sector package consisting of several activities by revising and realigning various components of Department of Animal Husbandry & Dairying schemes for next 5 years starting from 2021-22.

Details

- The package envisages Central Government's support amounting to Rs.9800 crore over duration of 5 years for leveraging total investment of Rs.54,618 crore for 5 years.
- The initiative aims to boost growth in livestock sector and thereby making animal husbandry more remunerative to 10 crore farmers engaged in Animal Husbandry Sector.
- The revised and realigned scheme component related to Rashtriya Gokul Mission is crucial for development and conservation of indigenous breeds and would also contribute in improving the economic condition of the rural poor as most of the low producing indigenous breeds are with small and marginal farmers and landless labourers.

Categories

- **Development Programmes** which includes Rashtriya Gokul Mission, National Programme for Dairy Development (NPDD), National Livestock Mission (NLM) and Livestock Census and Integrated Sample Survey (LC & ISS) as sub-schemes.
- **Disease Control programme** renamed as Livestock Health and Disease Control (LH & DC) which includes the present Livestock Health and Disease Control (LH & DC) scheme and National Animal Disease Control Programme (NADCP).
- **Infrastructure Development Fund** wherein, the Animal Husbandry Infrastructure Development fund (AHIDF) and the Dairy Infrastructure Development Fund (DIDF) are merged and the present scheme for support to Dairy Cooperatives and Farmer Producer Organizations engaged in Dairy activities is also included in this third category.

Awas Par Samvaad,

In news

PMAY-U launches a Short Film Contest – Khushiyon Ka Ashiyana for all Indians above 18 Years of age, as part of Azadi ka Amrut Mahotsav.

Aim

'Awas Par Samvaad' aims to create awareness and promote discussion, deliberation and dissemination on 'Housing for All' among multiple stakeholders belonging to varied streams of learning and practices, e.g. engineering, urban community development, planning, finance, etc.

Details

- Awas Par Samvaad, a Nation-wide Dialogue also launched to create awareness and promote discussion on 'Housing for All' among multiple stakeholders.
- This will be done through 75 nation-wide workshops and seminars to be conducted between July 1 to September 30, 2021 by educational institutions and Primary Lending Institutions in association with States/UTs.
- Both the ongoing initiatives have been evincing enthusiastic participation and registrations are being currently received.
- PMAY-U lays constant emphasis on connecting with its beneficiaries and engaging with all stakeholders.
- The two initiatives will capture the turnaround in peoples' lives on moving into their own pucca houses, their stories of joy and happiness, and their emotional journeys besides voices and aspirations of all stakeholders.

National Project on Organic Farming

In news

Under Capital investment Subsidy Scheme (CISS) of National Project on Organic Farming (NPOF), 100% assistance is provided to State Government / Government agencies for setting up of mechanized fruit/vegetable market Agro waste compost production unit.

National Project on Organic Farming

- Under CISS until now, 12 Fruit and vegetable compost units have been established.
- National Project on Organic Farming (NPOF) is a continuing central sector scheme since 10th Five Year Plan.
- Planning Commission approved the scheme as pilot project for the remaining two and half years of 10th plan period with effect from 01.10.2004 with an outlay of Rs. 57.04 crore.
- The scheme is continuing in the 11th plan with an outlay of Rs.101.00 crore.

Objectives

- Promotion of organic farming in the country through technical capacity building of all the stakeholders including human resource development, transfer of technology, promotion and production of quality organic and biological inputs, awareness creation and publicity through print and electronic media.
- Statutory quality control of biofertilizers and organic fertilizers under the Fertilizer (Control) Order (FCO), 1985, including revision of standards and testing protocols keeping in view the advances in research and technology and bringing remaining organic inputs under quality control regime.
- Capacity building for soil health assessment, organic input resource management, technology development through support to research and market development.
- Capacity Building for low cost certification system known as "Participatory Guarantee System".

Steel Scrap Recycling Policy

In news

It provides a framework to facilitate and promote establishment of metal scrapping centers in India for scientific processing & recycling of ferrous scrap generated from various sources.

About the Policy

- The policy framework provides standard guidelines for collection, dismantling and shredding activities in an organized, safe and environmentally sound manner.
- The Policy enumerates responsibilities for setting up collection, dismantling centre and scrap processing centre, and the roles of aggregators and responsibilities of the Government, manufacturer and owner.
- Steel Scrap Recycling Policy does not envisage setting up of scrap centres by the Government.
- The role of Government is to be an enabler and provide a framework to facilitate the eco-system of metal scrapping in the country.
- The decision to set up scrap centres is of entrepreneurs based on commercial considerations.
- The Scrapping Centres are approved and monitored by the authorized agencies of the State/Union Territory Governments.
- The Policy does not envisage any additional monitoring mechanism thereby ensuring that there is no additional compliance burden.

Infrastructure Development Programme

In news

The Ministry of Minority Affairs implements the Pradhan Mantri Jan Vikas Karyakram (PMJVK), in the identified Minority Concentration Areas (MCAs) of the country, with the objective to develop socio economic assets and basic amenities in the MCAs.

Details

- The scheme was restructured in May 2018 and areas identified for implementation of the scheme was increased from a coverage of 196 districts to 308 districts which includes 870 Minority Concentration Blocks, 321 Minority Concentration Towns and 109 Minority Concentration District Headquarters.
- The District Headquarters were identified as Minority Concentration Areas for the first time.

Pradhan Mantri Jan Vikas Karyakram (PMJVK)

- It seeks to provide better socio economic infrastructure facilities to the minority communities particularly in the field of education, health & skill development which would further lead to lessening of the gap between the national average and the minority communities with regard to backwardness parameters.
- The erstwhile Multi-sectoral Development Programme (MsDP) has been restructured and renamed as Pradhan Mantri Jan Vikas Karyakram for effective implementation since 2018.

Defence & Security

7th INDIAN OCEAN NAVAL SYMPOSIUM (IONS)

In news

The 7th edition of Indian Ocean Naval Symposium (IONS), a biennial event, was hosted by the French Navy at La Réunion from 28 June to 01 July 2021.

Participants

Admiral Karambir Singh, Chief of the Naval Staff, Indian Navy, participated virtually in the inaugural session of the event and provided his congratulatory remarks to the Outgoing and Incoming Chairmen.

About the event

- IONS, conceived by the Indian Navy in 2008, seeks to enhance maritime cooperation among Navies of the littoral states of the IOR by providing an open and inclusive forum for discussion of regionally relevant maritime issues that would lead to common understanding on the way ahead.
- During the Symposium, SME presentations were made by French Institute of International Relations - Observatoire du Climat, European Union, Indian Ocean Commission, IFC Singapore, RMIFC Madagascar and EU led Critical Maritime Routes Indian Ocean (CRIMARIO).
- The Symposium also held panel discussions themed on the three IONS working Groups viz., HADR, Maritime Security and Information Sharing & Interoperability.
- The Naval Maritime Foundation (NMF) also participated in the Panel Discussion on HADR.

DRDO's Short Span Bridging System-10 m

In news

The first production lot of 12 Short Span Bridging System (SSBS)-10 m, designed and developed by Defence Research and Development Organisation (DRDO), has been inducted into the Indian Army.

Details

- The SSBS-10 m plays a crucial role in bridging the gaps up to 9.5 m as a single span providing a 4 m wide, fully decked roadway, ensuring faster movement of the troops.
- The Project Short Span Bridging System involved the development of two prototypes of 5 m SSBS on Tatra 6x6 chassis and another two prototypes of 10 m SSBS on Tatra 8x8 re-engineered chassis.
- Both the systems have undergone rigorous Directorate General of Quality Assurance (DGQA), MET and User trials and after successful completion of all the trials, the systems were recommended for induction into the services.
- The system will help in quick movement of troops and enhance the mobilization of resources.

INS TABAR EXERCISES

In news

As part of the ongoing deployment to the Mediterranean, INS Tabar entered the Port of Naples, Italy on 03 Jul 21.

Details

- The ship was accorded a warm welcome by the Italian Navy.
- During the stay in port the Commanding Officer Captain Mahesh Mangipudi called on the senior officers of the Prefect of Naples Authority, the regional Italian Navy Headquarters and the Coast Guard Headquarters at Naples.
- On departure from port, the ship also undertook a Maritime Partnership Exercise with ITS Antonio Marceglia (F 597), a frontline frigate of the Italian Navy, on 04 and 05 July 2021 in the Tyrrhenian Sea.
- The exercise covered a wide range of naval operations including air defence procedures, replenishment at sea, communication drills and cross deck helo operations by day and night.
- The exercise was mutually beneficial in enhancing interoperability and towards consolidating combined operations against maritime threats.
- The exercise culminated with a 'Steam Past' by the two ships, as per the naval custom.

Missile Akash-NG

In news

DRDO successfully flight-tested the New Generation Akash Missile (Akash-NG), a surface-to-air Missile from Integrated Test Range (ITR) off the coast of Odisha.

Highlights

- The flight trial was conducted from a land-based platform with all weapon system elements such as Multifunction Radar, Command, Control & Communication System and launcher participating in deployment configuration.
- The missile system has been developed by Defence Research & Development Laboratory (DRDL), Hyderabad in collaboration with other DRDO laboratories.
- The launch was witnessed by the representatives of Indian Air Force.

- In order to capture flight data, ITR deployed a number of Range stations like, Electro Optical Tracking System, Radar and Telemetry.

Significance

Once deployed, the Akash-NG weapon system will prove to be a force multiplier for the air defence capability of the Indian Air Force.

Anti-Drone System

In news

DRDO has developed anti-drone system to neutralize enemy drone attack.

Details

- The Indigenous Drone Technology is capable of counter attacks including detection, Soft Kill (for jamming the communication links of Drone) and Hard Kill (Laser based hard kill to destroy the Drone) of enemy Drones.
- The System is already demonstrated to Armed Services and other internal security agencies.
- The indigenous DRDO Counter-Drone Technology is transferred to M/s BEL.
- Simultaneously Transfer of Technology (ToT) of the Counter-Drone System is offered to other companies.

Anti-drone system

- Anti-drone systems detect and or intercept unwanted drones and unmanned aerial vehicles (UAVs).
- They are deployed to protect areas such as airports, critical infrastructure, large public spaces such as stadiums, and military installations and battlefields.

Features of the anti drone system

- The system can detect and jam micro drones up to 3 km and use a laser to bring down a target up to 1-2.5 km depending on the wattage of the laser weapon. It has a radar detection range of four kilometres, a jamming range of more than two kilometres and a kill range of more than one kilometre.
- The system can identify drone threats instantly and terminate them. It has the capabilities to both detect and destroy drones in the air.
- It can effectively counter increased drone-based activity in the western and northern sectors of India.
- The drone system was first deployed to provide security cover to India's Republic Day Parade this year.
- The system was also deployed during the Modi-Trump roadshow in 2020 in Ahmedabad to thwart any aerial threat from drones.

Miscellaneous

8th Edition of the National Community Radio Awards

In news

Ministry of Information & Broadcasting takes immense pleasure in highlighting the outstanding efforts of the winners of the 8th edition of the National Community Radio Awards.

Details

- Community Radio are focused on local issues for the benefit of the local community in a radius of 10-15 Kms.

- National Community Radio Awards are generally conferred every year.
- So far, 7 National CR awards have been conferred. During the year 2020-21, the 8th National Community Radio Awards were conferred.
- The main source of funding for the station include local advertisements, membership fees, advertisements from the local administration, and marketing of local products etc.
- The station has been able to conduct variety of programmes to raise its popularity at the local level.
- It has been helpful to the local administration especially in disasters and traffic management. The viability of the station lies in all four pillars such as content, human resource, technical and financial stability.

Categories of award

- Thematic Award
- Most Innovative Community Engagement Award
- Promoting Local Culture Award
- Sustainability Model Award

Regeneron International Science and Engineering Fair (ISEF)

In news

Team India 2021 wins 9 Grand Awards and 8 Special Awards at Regeneron International Science and Engineering Fair (ISEF).

Details

- The award was for innovations ranging from the identification of genes responsible that resist abiotic stress in species to an augmented reality smart stethoscope that allows non-medicals to perform accurate pulmonary screening.
- These innovations were by young students who received the awards and brought accolades home.
- These students have competed with 1833 budding scientists from 64 countries, regions, and territories across the globe and won 17 awards.

About the award

- IRIS National Fair was held virtually this year and saw participation from more than 65,000 students and science enthusiasts, wherein the projects represented a wide range of scientific disciplines and were judged under 21 categories.
- Each project went through a stringent judging process to select Team India 2021.
- The team was subsequently mentored by the IRIS Scientific Review Committee members to prepare it for participation in ISEF.
- 'IRIS National Fair' is a program of EXSTEMPLAR Education Linkers Foundation; funded by Broadcom and supported by the Department of Science and Technology (DST), Government of India.
- School students based in India in the age group 10 to 17 with innovative projects can participate in it responding to invitations for applications.
- IRIS aligns with 5 national level mega-fairs - National Children Science Congress (NCSC); Science Fair by National Council of Science Museums (NCSM); Jawaharlal Nehru Science Fair by National Council of Educational Research & Training (NCERT); Central Board of Secondary Education (CBSE) Science Exhibition; Innovation in Science Pursuit for Inspired Research (INSPIRE) awards program.

Report on United District Information System for Education Plus (UDISE+) 2019-20

In news

Union Education Minister, Shri Ramesh Pokhriyal 'Nishank' released the Report on United Information System for Education Plus (UDISE+) 2019-20 for School Education in India.

Highlights of report

- As per the UDISE+ report 2019-20, Gross Enrolment Ratio at all levels of school education has improved in 2019-20 compared to 2018-19.
- Pupil-Teacher Ratio (PTR) has improved at all levels of school education.
- According to the report, in 2019-20, enrolment of girls from primary to higher secondary is more than 12.08 crore.
- This is a substantial increase by 14.08 lakh compared to 2018-19.
- Between 2012-13 and 2019-20, the Gender Parity Index (GPI) at both Secondary and Higher Secondary levels have improved.
- The UDISE+ report shows a remarkable improvement in the number of schools with functional electricity, with functional computers, internet facility in 2019-20 over the previous year.
- Another major improvement is seen in the number of schools with hand wash facility.
- In year 2019-20, more than 90% schools in India had hand wash facility as compared to only 36.3% in 2012-13.
- The UDISE+ system of online data collection from the schools was developed in the year 2018-19 to overcome the issues related to manual data filling in paper format and subsequent feeding at the block or district level, which was in practice in the UDISE data collection system from 2012-13.

Liverpool loses its world heritage status

In news

The English city of Liverpool has been removed from UNESCO's list of world heritage sites after the United Nations' cultural agency found new buildings, including a football stadium, undermined the attractiveness of its Victorian docks.

Liverpool

- Liverpool was named a World Heritage Site in 2004, joining cultural landmarks such as the Great Wall of China and the Taj Mahal.
- The world's first integrated sewer system was constructed in Liverpool

Other sites removed from the list

The only other sites stripped previously of the title are a wildlife sanctuary in Oman in 2007 after poaching and habitat loss, and the Dresden Elbe Valley in Germany in 2009 when a four-lane motorway bridge was built over the river.

UNESCO's world heritage

- A World Heritage Site is a landmark or area with legal protection by an international convention administered by the United Nations Educational, Scientific and Cultural Organization (UNESCO).
- World Heritage Sites are designated by UNESCO for having cultural, historical, scientific or other form of significance.
- The sites are judged to contain "**cultural and natural heritage around the world considered to be of outstanding value to humanity**".