

CURRENT AFFAIRS
16TH TO 28TH FEBRUARY 2019

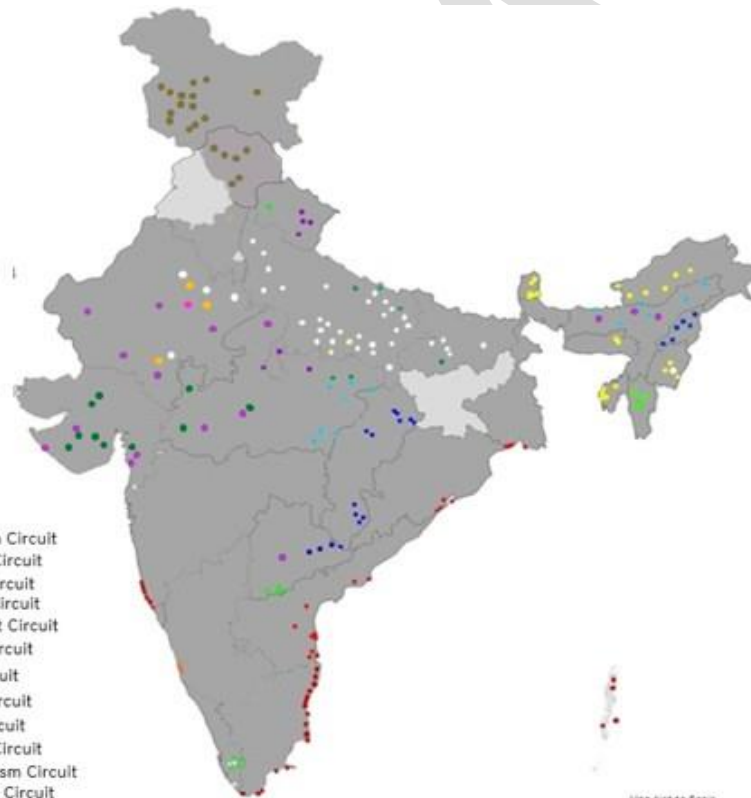
ECO CIRCUITS

'Development of Eco Circuit: Pathanamthitta – Gavi – Vagamon – Thekkady' under the Swadesh Darshan scheme of Ministry of Tourism has been inaugurated recently.

HIGHLIGHTS

- Eco Circuit is one of the fifteen thematic circuits identified for development under Swadesh Darshan Scheme- Integrated development of theme- based tourist circuits in the country. T
- he submission of proposals by the State Governments/UT Administrations under the scheme is a continuous process.
- The projects are sanctioned subject to availability of funds, submission of suitable detailed project reports, adherence to scheme guidelines and utilization of funds released earlier.
- The completion of the projects sanctioned under the scheme would result in increased tourist inflow thereby creating employment opportunities for the local community.

SWADESH DARSHAN SCHEME



- Government of India, Ministry of Tourism (MoT) launched the Swadesh Darshan Scheme (Central Sector Scheme)– for integrated development of theme-based tourist circuits in the country in 2014-15.
- The duration of Swadesh Darshan Scheme is till the 14th Finance Commission Period i.e. March 2020.

- Tourist Circuit is defined as a route having at least three major tourist destinations which are distinct and apart. Circuits should have well defined entry and exit points. A tourist who enters should get motivated to visit most of the places identified in the circuit.
- A Circuit could be confined to a State or could be a regional circuit covering more than one State/Union Territory. These circuits may have one dominant theme and other sub-themes.
- Projects under the scheme shall be under the following identified themes; Eco-tourism, Wildlife, Buddhist, Desert, Spiritual, Ramayana, Krishna, Coastal, Northeast, Rural, Himalayan, Tribal and Heritage.
- The Scheme is 100% centrally funded and efforts are made to achieve convergence with other schemes of Central and State Governments and also to leverage the voluntary funding available for Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and Corporate Sector.

DEENDAYAL DISABLED REHABILITATION SCHEME (DDRS)

“Regional Conference on Deendayal Disabled Rehabilitation Scheme (DDRS)” is being organized by the Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment, Government of India at Kolkata, West Bengal.

It will cover 13 States of Eastern & North Eastern regions namely West Bengal, Jharkhand, Odisha, Chhattisgarh, Bihar, Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim & Tripura.

DDRS

- Ministry of Social Justice & Empowerment, Department of Empowerment of Persons with Disabilities implements a scheme titled ‘Deendayal Disabled Rehabilitation Scheme (DDRS)’
- Under DDRS, Grant-in-Aid is released to about 600 NGOs every year. About 10% of total NGOs under DDRS, 10% of total grant and 10% of Special School for Children with Intellectual Disabilities are from Western Indian States.
- DDRS is a Central Sector Scheme of Government of India which is being implemented since 1999 for providing financial assistance to NGOs working for education and rehabilitation of persons with disabilities.
- This scheme was revised in 2018 and the revised scheme is being implemented since 1st April 2018.

The objectives of the scheme are:

1. To create an enabling environment to ensure equal opportunities, equity, social justice and empowerment of persons with disabilities.
2. To encourage voluntary action for ensuring effective implementation of the People with Disabilities (Equal Opportunities and Protection of Rights) Act of 1995.

INTERNATIONAL VISION ZERO CONFERENCE

Ministry of Labour and Employment inaugurated the three days Conference on the VISION ZERO and its relevance to Occupational Safety and Health being held in Mumbai.

The Conference has been organized by **Directorate General Factory Advice and Labour Institutes (DGFASLI), Ministry of Labour and Employment, German Social Accident Insurance (DGUV), Germany in association with Indian Institute of Technology, Bombay and International Social Security Association - Manufacturing, Construction and Mining.**

HIGHLIGHTS

- The concept of '**Vision Zero**' is fast gaining international acceptance and is expected to leverage the efforts of the Government of India to raise the occupational safety and health standards in the country so as to improve the occupational safety and health situation.
- The concept of Vision Zero is based on four fundamental principles viz. ***life is non-negotiable, humans are fallible, tolerable limits are defined by human physical resistance, and people are entitled to safe transport and safe workplaces.***
- The Vision is based on ***principles of Controlling Risks, Ensuring Safety and Health in Machines, Equipment and Workplaces and Skill Upgradation of Workforce.***

OCCUPATIONAL SAFETY & HEALTH SITUATION

- As defined by the World Health Organization (WHO) "occupational health deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards."
- Since 1950, the **International Labour Organization (ILO) and the World Health Organization (WHO)** have shared a common definition of occupational health.
- It was adopted by the Joint ILO/WHO Committee on Occupational Health at its first session in 1950 and revised at its twelfth session in 1995.
- The main focus in occupational health is on three different objectives:
 - a) The maintenance and promotion of workers' health and working capacity.
 - b) The improvement of working environment and work to become conducive to safety and health.
 - c) Development of work organizations and working cultures in a direction which supports health and safety at work and in doing so also promotes a positive social climate and smooth operation and may enhance productivity of the undertakings.

Occupational safety and health (OSH), also commonly referred to as occupational health and safety (OHS), occupational health or workplace health and safety (WHS), is a multidisciplinary field concerned with the safety, health, and welfare of people at work.

INDIA

- The Labour Ministry formulates national policies on occupational safety and health in factories and docks with advice and assistance from Directorate General of Factory Advice Service and Labour Institutes (DGFASLI), and enforces its Policies through inspectorates of factories and inspectorates of dock safety.
- DGFASLI is the technical arm of the Ministry of Labour & Employment, Government of India and advises the factories on various problems concerning safety, health, efficiency and well - being of the persons at work places.
- The DGFASLI provides technical support in formulating rules, conducting occupational safety surveys and also for conducting occupational safety training programs

PCS1X MARITIME-COMMERCE PORTAL

- PCS1x is an upgraded version of the e-commerce portal Port Community System (PCS).
- It has been developed in record time by the Indian Ports Association, based on feedback from stakeholders using PCS.
- PCS has played a vital role in enhancing 'Ease of Doing Business' in the maritime sector by facilitating a transparent and paperless system for electronic submission of trade document, resulting in faster turnaround time and dwell time.

- PCS lx is a new generation system with a user-friendly interface that brings together various stakeholders of the maritime sector, and facilitates Government-to-Business, Business –to-Government and Business-to-Business transactions within the required legal framework.
- It ensures extreme levels of cyber security.
- The architecture of PCS is built on ‘open platform’ technology to integrate / latch on to any new concept or module available in the industry without disturbing the current ecosystem.
- PCS enables trade to have an improved communication with the customs as they have also embarked on an Application Programming Interface (API) based architecture, thereby enabling real time interaction.
- It provides Single Window platform for maritime industry and authorities, a user-friendly mobile application for stakeholders, event-based notification and alerts, interactive dashboard, capability of PCS-to-PCS integration (Indian PCS with other international PCS) and 24/7 helpdesk for location support.
- The platform allows improvement in payment cycle, transparency of transaction cycles, detailed tracking of vessels and berthing schedules.
- It can be integrated with Gate system with RIFD, can produce E-copy of reports and notices and be used for cargo/truck trailer tracking.

SCIM PORTAL UNDER SAFE CITY PROJECT

In order to provide safety for women in public spaces, the Government has identified eight cities for implementation of Safe City project.

The 8 major cities which have been chosen are Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Lucknow and Mumbai.

Detailed projects for this have been prepared jointly by the municipal bodies and the local police authorities. The projects include creation on ground assets & resources and mindset safety of women.

FEATURES

1. Identification of sensitive hot spots in each city.
2. Installation of CCTV surveillance covering the entire hot spot.
3. Automated number plate reading machines to be deployed in extremely sensitive areas.
4. Intensive patrolling in vulnerable areas beyond the identified hot spots.
5. Improving street lighting and public toilet facilities for women.
6. Others like setting up women help desks in police stations, augmentation of women support centres etc.

HIGHLIGHTS

- All the above measures would be coordinated through an Integrated Smart Control Room in the city.
- In order to facilitate States to monitor and manage the Safe City projects and avoid duplication on ground, an online Safe City Implementation Monitoring (SCIM) portal has been developed by MHA which will also be launched.
- SCIM will facilitate online tracking of deployment of assets and infrastructure created under the Safe City projects.
- SCIM facilitates an evidence based online monitoring system.
- SCIM also creates a digital repository of assets, infrastructure and social outreach programs, as well as best practices achieved in each City.

NATIONAL POLICY ON ELECTRONICS 2019

The Union Cabinet gave its approval to the National Policy on Electronics 2019 (NPE 2019), proposed by the Ministry of Electronics and Information Technology (MeitY).

The Policy envisions positioning India as a global hub for Electronics System Design and Manufacturing - (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally.

FEATURES

- Create eco-system for globally competitive ESDM sector: Promoting domestic manufacturing and export in the entire value-chain of ESDM.
- Provide incentives and support for manufacturing of core electronic components.
- Provide special package of incentives for mega projects which are extremely high-tech and entail huge investments, such as semiconductor facilities display fabrication, etc.
- Formulate suitable schemes and incentive mechanisms to encourage new units and expansion of existing units.
- Promote Industry-led R&D and innovation in all sub-sectors of electronics, including grass root level innovations and early stage Start-ups in emerging technology areas such as 5G, IoT/ Sensors, Artificial Intelligence (AI), Machine Learning, Virtual Reality (VR), Drones, Robotics, Additive Manufacturing, Photonics, Nano-based devices, etc.
- Provide incentives and support for significantly enhancing availability of skilled manpower, including re-skilling.
- Create Sovereign Patent Fund (SPF) to promote the development and acquisition of IPs in ESDM sector.
- Promote trusted electronics value chain initiatives to improve national cyber security profile.

BACKGROUND

The implementation of the Schemes/ Programmes under the aegis of the National Policy on Electronics 2012 (NPE 2012) has successfully consolidated the foundations for a competitive Indian ESDM value chain. NPE 2019 proposes to build on that foundation to propel the growth of ESDM industry in the country. The National Policy of Electronics 2019 (NPE 2019) replaces the National Policy of Electronics 2012 (NPE 2012).

Targets: Promote domestic manufacturing and export in the entire value-chain of ESDM for economic development to achieve a turnover of USD 400 billion (approximately INR 26,00,000 crore) by 2025. This will include targeted production of 1.0 billion (100 crore) mobile handsets by 2025, valued at USD 190 billion (approximately INR 13,00,000 crore), including 600 million (60 crore) mobile handsets valued at USD 110 billion (approximately INR 7,00,000 crore) for export.

KHADI GRAMODYOG YOJANA

Cabinet approves continuation of Khadi Gramodyog Vikas Yojana from 2017-18 to 2019-20.

HIGHLIGHTS

- To continue the existing schemes of MPDA, Khadi Grant, ISEC and Village Industry Grant, all subsumed under 'Khadi and Gramodyog Vikas Yojana' at the total cost of Rs. 2800 crore for the period 2017-18 to 2019-20.

- To bring in a new component of 'Rozgar Yukta Gaon' to introduce enterprise-based operation in the Khadi sector and to create employment opportunities for thousands of new artisans in the current and next financial year (2018-19 and 2019-20).

ROZGAR YUKTA GAON

- Rozgar Yukta Gaon (RYG) aims at introducing an 'Enterprise-led Business Model' in place of 'Subsidy-led model' through partnership among 3 stakeholders- KRDP-assisted Khadi Institution, Artisans and Business Partner.
- It will be rolled out in 50 Villages by providing 10,000 Charkhas, 2000 looms & 100 warping units to Khadi artisans, and would create direct employment for 250 Artisans per village.

GRID CONNECTED ROOFTOP SOLAR PROGRAMME

The Cabinet Committee on Economic Affairs has given its approval for the Phase-II of Grid Connected Rooftop Solar Programme for achieving cumulative capacity of 40,000 MW from Rooftop Solar (RTS) Projects by the year 2022.

HIGHLIGHTS

- In the Phase-II Programme Central Financial Assistance (CFA) for the residential sector has been restructured with availability of 40% CFA for RTS systems up to 3 kW capacity and 20% for RTS system capacity beyond 3 kW and up to 10 kW.
- DISCOMs and its local offices shall be the nodal points for implementation of the programme.
- Since, DISCOMs are required to incur additional expenditure for implementation of scheme in terms of additional man-power, creating infrastructure, capacity building, awareness, etc.
- It is approved to compensate them by providing performance linked incentives.
- These incentives will be provided to enable DISCOMs to create an enabling ecosystem for expeditious implementation of RTS programme in their area.
- The incentives to the DISCOMs will be available only for initial capacity addition of 18,000 MW under the scheme.
- The Programmes will have substantial environmental impact in terms of savings of CO2 emission.
- Considering average energy generation of 1.5 million units per MW, it is expected that addition of 38 GW solar rooftop plants under Phase-II by year 2022 will result in CO2 emission reduction of about 45.6 tonnes per year.

AKSHAY URJA SHOP

- The ministry has been promoting the establishment of Aditya Solar Shops in major cities of the country since 1995 with a view to make solar energy products easily available and to provide easy after sales repair services.
- During the 9th Plan period, shops were established by the State Nodal Agencies (SNAs) / Manufacturer's Associations and reputed NGOs.
- During the 10th Plan period, private entrepreneurs have also been allowed to establish these shops.
- Under the present scheme, the shops are renamed as "Akshay Urja Shops" with a view to cover wider sale and service of all renewable energy devices and systems including solar energy products.
- The network of the shops will be expanded by encouraging private entrepreneurs and NGOs to set up and operate such shops in all districts of the country.

- The objective of the programme is to support the establishment of one shop in each district for creation of a network of retail outlets in form of “Akshay Urja Shops” in all the districts for sale and service of solar energy and other renewable energy products.

KUSUM

The Cabinet Committee on Economic Affairs has approved launch of Kisan Urja Suraksha evam Utthaan Mahabhiyan with the objective of providing financial and water security to farmers.

The proposed scheme consists of three components:

- Component-A: 10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Power Plants.
- Component-B: Installation of 17.50 lakh standalone Solar Powered Agriculture Pumps.
- Component-C: Solarisation of 10 Lakh Grid-connected Solar Powered Agriculture Pumps.

All three components combined, the scheme aims to add a solar capacity of 25,750 MW by 2022.

HIGHLIGHTS

- The **Component-A and Component-C** will be implemented on pilot mode for 1000 MW capacity and one lakh grid connected agriculture pumps respectively and thereafter, will be scale-up on success of pilot run.
- **Component-B** will be implemented in full-fledged manner.
- Under **Component A**, Renewable power plants of capacity 500 KW to 2 MW will be setup by individual farmers/ cooperatives/panchayats /farmer producer organisations (FPO) on their barren or cultivable lands.
- The power generated will be purchased by the DISCOMs at Feed in tariffs determined by respective SERC.
- The scheme will open a stable and continuous source of income to the rural land owners. Performance Based Incentives @ Rs. 0.40 per unit for five years to be provided to DISCOMs.
- Under **Component B**, individual farmers will be supported to install standalone solar pumps of capacity up to 7.5 HP. Solar PV capacity in kW equal to the pump capacity in HP is allowed under the scheme.
- Under **Component C** of the scheme, individual farmers will be supported to solarise pumps of capacity up to 7.5 HP.
- Solar PV capacity up to two times of pump capacity in kW is allowed under the scheme. The farmer will be able to use the generated energy to meet the irrigation needs and the excess available energy will be sold to DISCOM.
- This will help to create an avenue for extra income to the farmers, and for the States to meet their RPO targets.
- For both **Component-B and Component-C**, central financial assistance (CFA) of 30% of the benchmark cost or the tender cost, whichever is lower, will be provided.
- The State Government will give a subsidy of 30%; and the remaining 40% will be provided by the farmer.
- Bank finance may be made available for meeting 30% of the cost. The remaining 10% will be provided by the farmer.
- Higher CFA of 50% will be provided for North Eastern States, Sikkim, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Lakshadweep and A&N Islands.

SWAYATT

SWAYATT is an initiative to promote Start-ups, Women and Youth Advantage Through e-Transactions on Government e Marketplace (GeM).

- This will bring together the key stakeholders within the Indian entrepreneurial ecosystem to Government e-Marketplace the national procurement portal.
- Commerce Minister also dedicated GeM start-up Runway- an initiative of GeM in association with Start-up India to facilitate Start-ups registered with Start-up India to access the public procurement market and sell innovative products and services to government buyers.
- Approximately 1,516 Start-ups are presently registered on GeM with 12,915 products to offer and have received more than 5,000 orders till date.
- GeM Start-up Runway seeks to align certified Start-ups with Government procurement orders and contracts, to enable Start-ups in scaling operations from ideation to growth stage in minimal time, and spur hyper-local job-creation and wealth-generation and for achieving socially-inclusive economic growth.
- GeM Start-up Runway will address goals and objectives under United Nations Sustainable Development Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

SAFAR MOBILE APP

- This app will help to gauge the actual issues faced by transporters on the road.
- The app tracks the incidence of a number of parameters faced by transporters and automatically records the location of the issue.
- Transporters, truck drivers, and general public may use the app for reporting their logistics issues to the Ministry of Commerce and Industry.
- The app is available in 8 languages.

NATIONAL RURAL ECONOMIC TRANSFORMATION PROJECT

The Union Cabinet has approved the Implementation of an Externally Aided Project namely “National Rural Economic Transformation Project (NRETP) under the Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) through loan assistance (IBRD Credit) from World Bank.

The technical assistance provided by NRETP and the higher-level interventions facilitated by the project will enhance the livelihoods promotion and access to finance and scale-up initiatives on digital finance and livelihood interventions.

FEATURES

- DAY-NRLM lays special emphasis on targeting the poorest of the poor and the most vulnerable communities and their financial inclusion.
- Innovative projects will be undertaken under NRETP to pilot alternate channels of financial inclusion, creating value chains around rural products, introduce innovative models in livelihoods promotion and access to finance and scale-up initiatives on digital finance and livelihood interventions.
- DAY-NRLM provides for mutually beneficial working relationship and formal platforms for consultations between Panchayati Raj Institutions (PRIs) and Community Based Organizations (CBOs).
- NRLM has also developed activity map to facilitate convergence in different areas of interventions where NRLM institutions and PRIs could work together which has been disseminated to all state Rural Livelihood Missions.

OPERATION DIGITAL BOARD

The Union HRD Ministry has launched Operation Digital Board to leverage technology in order to boost quality education in the country.

HIGHLIGHTS

- ODB aims to set up one digital and interactive board per classroom in government and government-aided schools, for students from class 9 to 12 in schools, in addition, to classes in higher education institutions by 2022.
- Additionally, e-resources will be made available to students for anytime, anywhere access.
- The scheme aims at converting a conventional classroom into a digital classroom.
- It is a revolutionary step which will make the learning as well as the teaching process interactive and popularise flipped learning as a pedagogical approach.
- It will also help in provisioning of personalised adaptive learning as well as Intelligent Tutoring by exploiting emerging technologies like Machine Learning, Artificial Intelligence & Data Analytics.
- UGC will be the implementing agency for ODB in HEIs. For the 2 lakh class rooms, the cost is estimated at Rs. 2000 crores. This can be implemented as a Central scheme, as a loan from HEFA.
- Besides ODB, the launching of e-Pathshala, DIKSHA, NROER, NPTEL, e-pgpathshala SWAYAM and SWAYAM-Prabha DTH Channels etc. by MHRD has provided adequate content of high quality which can be taken to every classroom, and thereby raise the standards of teaching, irrespective of the location of the schools and colleges. Moreover, such technology enabled learning can also inspire teachers across the country to raise their own standards of teaching.

NIC TECHGOV AWARDS

- NIC TechGov is a competitive platform that presents a unique opportunity to the NIC officers posted in states and districts offices across the nation to accelerate their knowledge and learn emerging technologies.
- Total 203 teams cumulatively consisting of 514 members registered for the event under two different tracks called Innovation and Collab: DEV.
- Across different sub-tracks of TechGov 2019, 7 teams comprising 13 members and 8 teams with 19 members in total were declared winners in Gold and Silver categories respectively.

MINISTRY OF AYUSH & WHO

Ministry of AYUSH and WHO have jointly organized a three days Working Group Meeting for reviewing the WHO document "Benchmarks for Training in Yoga" in New Delhi.

HIGHLIGHTS

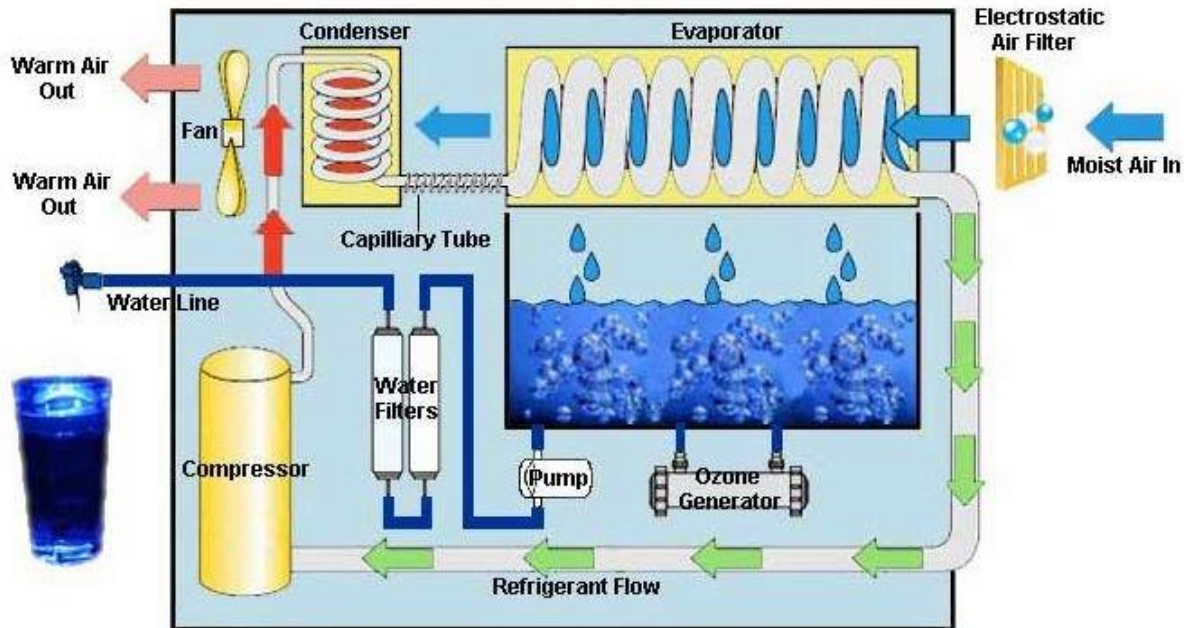
- The meeting is coordinated by Morarji Desai National Institute of Yoga.
- WHO is developing Benchmarks Document for Training in Yoga as part of its global strategy to strengthen the quality, safety and effectiveness of Traditional and Complementary Medicine.
- Development of this benchmarks document is included in the Project Collaboration Agreement signed between World Health Organization (WHO) and Ministry of AYUSH on Cooperation in the field of Traditional and Complementary Medicine under WHO strategy covering the period 2014-2023.
- World Health organization (WHO) has been launched Traditional Medicine Strategy 2014-2023 to help health care leaders to develop solution that contribute to a broader vision of improved health and patient autonomy.
- Under this WHO Traditional Medicine Strategy 2014-2023, a Project Collaboration Agreement (PCA) was signed between WHO and Ministry of AYUSH on 13 May, 2016 for cooperation on promoting the quality, safety and effectiveness of service provision in traditional and complementary medicine between WHO and Ministry of AYUSH (2016-2020).

ATMOSPHERIC WATER GENERATOR

Navratna Defence PSU Bharat Electronics Ltd (BEL) has unveiled its new product, the Atmospheric Water Generator (AWG), an innovative solution to meet the ever-increasing need for drinking water worldwide, today at Aero India 2019.

Groundwater, currently the main source of drinking water, is being depleted at alarming and unsustainable rates even as the search for alternate water sources continues.

HIGHLIGHTS



- BEL's Atmospheric Water Generator employs a novel technology to extract water from the humidity present in the atmosphere and purify it.
- It uses heat exchange for condensing the atmospheric moisture to produce pure, safe and clean potable water.
- The AWG comes with a Mineralisation Unit, which is used to add minerals which are required to make the water potable.
- The AWG is configurable in static and mobile (vehicular) versions and is available in 30 litres/day, 100 litres/day, 500 litres/day and 1,000 litres/day capacities.
- The Atmospheric Water Generator can be used to provide drinking water in community centres and public places like health care centres, schools, colleges, offices, railway stations, bus stands, airports, sea ports, off-shore oil rigs, military establishments, remote field areas and remote establishments and residential complexes.
- The Atmospheric Water Generator is being manufactured by BEL in collaboration with CSIR-IICT and MAITHRI, a start-up company based in Hyderabad.

TECHNOLOGY INCUBATION & DEVELOPMENT OF ENTREPRENEURS (TIDE 2.0) SCHEME

The Scheme has been devised to promote the momentum into the tech entrepreneurship landscape.

- The Scheme provides financial and technical support to incubators engaged in supporting ICT start-ups using emerging technologies such as IoT, AI, Block-chain, Robotics etc. in seven pre-identified areas of societal relevance.

BACKGROUND

- Department of Electronics and Information Technology (DeitY) is implementing a scheme titled “Technology Incubation and Development of Entrepreneurs (TIDE)”.
- Initially launched in 2008 the scheme has been revised and extended till March 2017. As per the scheme provision, 27 centres are being supported at academic institutions across India.
- TIDE has a multipronged approach in diverse areas of Electronics, ICT and Management.
- It aims to assist institutions of higher learning to strengthen their Technology Incubation Centres and enable young entrepreneurs to initiate technology start-up companies for commercial exploitation of technologies developed by them.
- TIDE Incubation Centres provide a gamut of services to new enterprises and facilitate linkages congenial for their survival and growth. The centres network with Angel Investors and Venture Capitalists who provide mentoring and financial support to the start-ups and enable tenant companies to mature over a period of 2-3 years and ultimately graduate to a commercial place to transact actual business.
- DeitY is providing financial and policy support for strengthening technology incubation activities on the premise that this would in the long run result in indigenous development of products and packages in the ICTE sector.

CENTRAL GENOMICS & QUALITY LABORATORY

Central Genomics and Quality Laboratory facility at ICAR - National Rice Research Institute (NRRI) in Cuttack (Odisha). It will help farmers in analyzing the quality of soil, water and produce.

NRRI

- NRRI has played stellar role in the development of agriculture not only in Eastern region but also at the national front.
- It was inception in 1946.
- The Institute contributed immensely in country's Green Revolution and steered ground breaking research in development of high-yield rice varieties thereby helping achieve self-sufficiency in rice production.
- In order to ensure nutritional security, for the first time in the world, the Institute recently released **two high-protein rice varieties (CR Dhan 310, CR Dhan 311)** and **two climate-smart varieties (CR Dhan 801 and CR Dhan 802)**, which are tolerant to both submergence and drought and few biotic stresses to face the challenges of climate change.
- It is working on developing and popularizing super-yielding varieties and agro-technologies for higher productivity, profitability, climate resilience and sustainability of rice farming.
- It is the nodal agency for planning, implementation and monitoring of Bringing Green Revolution in Eastern India (BGREI) programme which is being implemented in 118 districts of seven Eastern states.
- With its implementation, more than 25% of yield increase has been recorded in the states of Assam, Bihar and Chhattisgarh, whereas 12-15% yield increase has been reported in Odisha, West Bengal, Jharkhand and Eastern UP.
- It has developed **Mobile App ‘riceXpert’** which is helping in providing information to farmers in real time besides facilitating the flow of information from scientist to farmers.

RECENT ORDINANCES

The President of India on the 21st February, 2019 has promulgated the following four Ordinances, namely:

1. The Muslim Women (Protection of Rights on Marriage) Second Ordinance, 2019.
2. The Indian Medical Council (Amendment) Second Ordinance, 2019.
3. The Companies (Amendment) Second Ordinance, 2019.
4. The Banning of Unregulated Deposit Schemes Ordinance, 2019.

ATL DRONE MODULE

NITI Aayog's Atal Innovation Mission (AIM) and Drona Aviation, an IIT Bombay start-up, launched the 'ATL Drone module: Get, Set, Go' for Atal Tinkering Labs at the ongoing Aero India 2019 in Bengaluru.

HIGHLIGHTS

- With the ATL Drone Module, young students of India will learn how to create their own drones and use them for solving community problems in India.
- Drona Aviation is India's first developer drone company, with a focus on drone innovation.
- Atal Innovation Mission, housed at NITI Aayog, is Government of India's flagship initiative to foster a spirit of innovation and entrepreneurship across India.
- With the vision to empower our young generation with the 21st century skills of design thinking, problem solving, collaboration, critical thinking and so on, AIM has selected more than 5000 Atal Tinkering Labs (ATLs) where young innovators get access to latest technologies of microelectronics, Internet of Things (IoT), 3D printing, robotics, drone technology, artificial intelligence and so on. Previously, an ATL Space Module was also launched to inspire young innovators to reach for the stars.

AVIATION INFRASTRUCTURE PROJECTS

Civil Aviation Minister, Suresh Prabhu, inaugurated several infrastructure projects across the length and breadth of the country in New Delhi.

These airports include ***Trivandrum, Calicut airports in Kerala, Mangaluru airport in Karnataka, Madurai airport in Tamil Nadu, Rupsi airport in Assam, Jaipur airport in Rajasthan, Amritsar airport in Punjab and Imphal airport in Manipur.***

- Civil Aviation Ministry has recently launched **UDAN 3.1** and invited bids for airlines to fly over as many as 28 to 30 routes in order to cover the North Eastern region of India, hilly terrain of Uttarakhand, Jammu, Himachal Pradesh and establish intra island connectivity at Andaman and Lakshadweep islands.
- In the recently concluded Global Aviation Summit 2019 held in Mumbai in January this year, the Vision 2040 document with the theme "Flying for all" was released.
- The vision of UDAN scheme to open Indian skies and achieve its objective of "**SAB UDE - SAB JUDE**".

SUPER EFFICIENT AIR CONDITIONING PROGRAMME

Energy Efficiency Services Limited (EESL), a joint venture of four National Public Sector Enterprises under Ministry of Power, Government of India launched its Super-Efficient Air Conditioning Programme for residential and institutional consumers in the BSES area.

HIGHLIGHTS

- These Super-Efficient Air Conditioners are 40 percent more efficient than, but priced comparably with, the 3-star ACs currently available in the market (ISEER 3.8).
- The programme directly addresses the prospect of the nearly four-fold increase in energy consumption from buildings and cooling appliances in India by 2032, while also addressing goals of India's Cooling Action Plan and Hydro-chlorofluoro carbons Phase Out Management Plan, enabling achievement of India's targets under the Kigali and Paris Agreements.
- EESL and BSES have joined hands to implement a 12-month pilot of the programme by exchanging an agreement through which BSES Rajdhani Power Limited (BRPL) would assist in aggregating demand and providing local marketing and outreach support to promote energy efficient technologies in the areas it currently services, thereby covering over 25 lakh residential and institutional consumers in South and West Delhi.
- EESL's investment in the programme is partially supported by a grant from the Global Environment Facility (GEF), an independent financing mechanism that was established on the eve of the 1992 Rio Earth Summit to address global environmental issues.
- The GEF is an international partnership of 183 countries, international institutions, civil society organizations and the private sector.
- Further, Asian Development Bank (ADB) is providing necessary grant support and loan while United Nations Environment (UNEP) is providing technical assistance support to the Super-Efficient AC programme.

INDUS WATER TREATY

The Indus system comprises of main Indus River, Jhelum, Chenab, Ravi, Beas and Sutlej. The basin is mainly shared by India and Pakistan with a small share for China and Afghanistan.

BACKGROUND

- Under the Indus Waters Treaty signed between India and Pakistan in 1960, all the waters of three rivers, namely **Ravi, Sutlej and Beas (Eastern Rivers)** averaging around 33 million acres feet (MAF) were allocated to India for exclusive use.
- The waters of Western rivers - **Indus, Jhelum, and Chenab** averaging to around 135 MAF were allocated to Pakistan except for specified domestic, non-consumptive and agricultural use permitted to India as provided in the Treaty.
- India has also been given the right to generate hydroelectricity through run of the river (RoR) projects on the Western Rivers which, subject to specific criteria for design and operation is unrestricted.

PRESENT STATUS OF DEVELOPMENT IN INDIA

- To utilize the waters of the Eastern rivers which have been allocated to India for exclusive use, India has constructed Bhakra Dam on Satluj, Pong and Pandoh Dam on Beas and Thein (Ranjitsagar) on Ravi.
- These storage works, together with other works like Beas-Sutlej Link, Madhopur-Beas Link, Indira Gandhi Nahar Project etc has helped India utilize nearly entire share (95 %) of waters of Eastern rivers.
- However, about 2 MAF of water annually from Ravi is reported to be still flowing unutilized to Pakistan below Madhopur. To stop the flow of these waters that belong to India for its utilization in India, following steps have been taken:
 1. **Resumption of Construction of Shahpurkandi project:** This project will help in utilizing the waters coming out from powerhouse of Thein dam to irrigate 37000 hectares of land in J&K and Punjab and generate 206 MW of power.

2. **Construction of Ujh multipurpose project:** This project will create a storage of about 781 million cu m of water on river Ujh, a tributary of Ravi for irrigation and power generation in India itself and provide a total irrigation benefits of 31,380 ha in Kathua, Hiranagar and Samba district of J&K apart from providing water for the district Kathua of J&K.
3. **2ND Ravi Beas link below Ujh:** This project is being planned to tap excess water flowing down to Pakistan through river Ravi, even after construction of Thein Dam, by constructing a barrage across river Ravi for diverting water through a tunnel link to Beas basin. The project is expected to utilize about 0.58 MAF of surplus waters below Ujh dam by diverting the same to Beas basin for benefits of other co-basin states. Govt. of India declared this project as National Project .

EASE OF LIVING INDEX

- The Ministry has released 'Ease of Living Index, 2018' on August 13, 2018.
- The framework developed to measure 'Ease of Living' covers all pillars of urban development (Physical, Institutional, Social and Economic) and uses 78 indicators across 15 categories.
- The Ease of Living Index seeks to help cities assess their liveability vis-à-vis national and global benchmarks.
- It is to enable cities to leverage this knowledge to formulate plans and prioritise investments.
- Ease of Living assessment standards are linked to Sustainable Development Goals (SDGs) of United Nations (UN).

2ND EDITION OF iPRISM

The Cell for IPR Promotion and Management (CIPAM), Department for Promotion of Industry and Internal Trade, in collaboration with ASSOCHAM and ERICSSON India, has launched the second edition of 'iPrism', an Intellectual Property (IP) competition for students of schools, polytechnic institutes, colleges and universities.

HIGHLIGHTS

- Aiming to foster a culture of innovation and creativity in the younger generation, the competition will provide young creators an opportunity to see their creations recognized on a national platform.
- This year, entries are invited on "IP in Daily Life" in two categories – film making and comic book making. The film making competition will accept entries of 60 seconds long animated/film videos, while the comic book making encourages participants to narrate a story in comic strips under 5 pages.

The National IPR Policy was adopted on May 12, 2016, to create a vibrant IP ecosystem in the country. Creating IPR Awareness through outreach and promotional activities is a key objective of the Policy. The Cell for IPR Promotion and Management, set up under the aegis of the DPIIT to fulfil the policy objectives, has been actively involved in many outreach activities including a nation-wide IPR awareness campaign.

4TH GLOBAL DIGITAL HEALTH PARTNERSHIP SUMMIT

Union Minister of Health and Family Welfare inaugurated the '4th Global Digital Health Partnership Summit'.

- The global intergovernmental meeting on digital health is being hosted by the Ministry of Health and Family Welfare in collaboration with World Health Organization (WHO) and the Global Digital Health Partnership (GDHP).

- The Global Digital Health Partnership (GDHP) is an international collaboration of governments, government agencies and multinational organisations dedicated to improving the health and well-being of their citizens through the best use of evidence-based digital technologies.
- Governments are making significant investments to harness the power of technology and foster innovation and public-private partnerships that support high quality, sustainable health and care for all.
- It was established in 2018 as a platform to facilitate global collaboration and co-operation in the implementation of digital health services.
- The GDHP is currently focused on the five work streams: ***Cyber Security, Interoperability, Evidence and Evaluation, Policy Environments, Clinical and Consumer Engagement.*** •
- The Australian Digital Health Agency is providing the secretariat services for the first eighteen months of the GDHP.
- They can improve the safety, quality and effectiveness of healthcare, support earlier diagnosis of disease and the development of new medicines and treatments.
- They can empower patients, citizens and the care professionals who serve them.
- Delhi Declaration on digital health was adopted at the concluding session of the '4th Global Digital Health Partnership Summit.
- It calls for WHO's leadership in digital health and for it to establish a specific mechanism to centrally coordinate digital health to assist its Member States.

DIGITAL HEALTH

- Digital health involves the use of information and communication technologies to track well-being and health indicators such as blood pressure and heart rate.
- Digital health is also referred to as telehealth or mhealth.
- mhealth, or mobile health, is a branch of digital health specific to mobile phone technologies.
 1. Allows both the public and patients to self-manage their health.
 2. Care for patients with long-term conditions.
 3. Enables remote monitoring of patients Indian

RAIL DRISHTI

Minister of Railways & Coal, Shri Piyush Goyal has launched Rail Drishti dashboard, encompassing all the digitisation efforts in Indian Railways and promoting transparency and accountability.

- It brings information from various sources on a single platform and gives access to key statistics and parameters to every citizen of the country.
- This dashboard can be accessed using a desktop/laptop or a mobile device such as a phone or tablet.
- The application is mobile optimized for ease of use of public.

SUGAM – The Freight App

This tab give access to Indian Railways freight business information. It helps customers keep track of their consignment. It provides information on various terminals and associated nodal officers, indents status, prevailing freight rates, rake allocation plans, restrictions applicable etc. Freight performance and other statistics are also available on the tab.

EXERCISE SAMPRITI-2019

As part of the ongoing India Bangladesh defence cooperation, a joint military exercise Sampriti-2019 will be conducted at Tangail, Bangladesh from 02 March to 15 March 2019.

- Exercise Sampriti-2019 is an important bilateral defence cooperation endeavour between India and Bangladesh and this will be the eighth edition of the exercise which is hosted alternately by both countries.
- The exercise is aimed to strengthen and broaden the aspects of interoperability and cooperation between the Indian and Bangladesh Armies.
- The exercise will involve tactical level operations in a counter insurgency and counter terrorism environment under the UN mandate.

33RD FOUNDATION DAY OF DEPARTMENT OF BIOTECHNOLOGY

Department of Biotechnology in the Ministry of Science and Technology, Government of India, celebrated its 33rd Foundation Day in New Delhi with the theme as "Celebrating Biotechnology: Building Indian as an Innovation Nation".

The Minister announced key missions at the foundation day ceremony:

- **Atal Jai Anusandhan Biotech Mission - Undertaking Nationally Relevant Technology Innovation (UNaTI)**, which is expected to transform Health, Agriculture and Energy sectors during the next 5 years.
- This mission includes **GARBH-ini** - A Mission to promote Maternal and Child Health and develop prediction tools for pre-term berth.
- **IndCEPI** - A Mission to develop affordable vaccines for endemic diseases, Development of Biofortified and Protein Rich wheat - contributing to POSHAN Abhiyan, Mission on Anti-Microbial Resistance for Affordable Diagnostics and Therapeutics and Clean Energy Mission - Innovative Technology interventions for Swachh Bharat.

'YUVA SAHAKAR'

NCDC's new scheme 'Yuva Sahakar' was launched in November 2018 for giving wings to young entrepreneurs in cooperatives.

- Newly formed cooperatives will be able to take advantage of the 'Cooperative Start up and Innovation Fund' created by NCDC with liberalized assistance for cooperatives in the North Eastern Region, Cooperatives registered and operating in Aspirational Districts, cooperatives with 100% women/SC/ST/Person with Disability (PwD) members.
- National Cooperative Development Corporation (NCDC) has played a crucial role in promoting cooperative development in the country by progressively shaping its financial schemes and programmes for benefitting farmers through cooperatives.

SCHEME FOR HIGHER EDUCATION YOUTH IN APPRENTICESHIP AND SKILLS (SHREYAS)

The Human Resources Development Ministry has launched the Scheme for Higher Education Youth in Apprenticeship and Skills (SHREYAS) for providing industry apprenticeship opportunities to the general graduates exiting in April 2019 through the National Apprenticeship Promotional Scheme (NAPS).

- Launched in New Delhi, the program aims to enhance the employability of Indian youth by providing 'on the job work exposure' and earning of stipend.
- SHREYAS is a programme conceived for students in degree courses, primarily non-technical, with a view to introduce employable skills into their learning, promote apprenticeship as integral to education and also amalgamate employment facilitating efforts of the Government into the education system so that clear pathways towards employment opportunities are available to students during and after their graduation.

- SHREYAS is a programme basket comprising the initiatives of three Central Ministries, namely the **Ministry of Human Resource Development, Ministry of Skill Development & Entrepreneurship and the Ministry of Labour & Employment** viz the National Apprenticeship Promotion Scheme (NAPS), the National Career Service (NCS) and introduction of BA/BSc/B.Com (Professional) courses in the higher educational institutions.
- SHREYAS portal will enable educational institutions and industry to log in and provide their respective demand and supply of apprenticeship.

TECHNOLOGY SUPPORT AND OUTREACH PROGRAMME

The Ministry of Micro, Small and Medium Enterprises organized a programme on Technology Support and Outreach (TECH-SOP) in New Delhi.

HIGHLIGHTS

- The objective of the programme is to educate MSMEs and enhance their awareness about latest technological innovation available and sensitize them on the role of technology in creating competitiveness and opportunities.
- TECH – SOP is an initiative of the MSME Ministry to bridge the gap between research and development institutions and MSMEs so that they can use latest technologies and become a part of global value chain.
- A “India Green Tech Open Challenge” also launched to encourage MSMEs to adopt sustainable and green technologies so that they remain competitive in the long run.

SATAT SCHEME

Ministry of Petroleum and Natural Gas handed over the 100th Letter of Intent (LOI) to the Compressed Bio-Gas (CBG) Entrepreneur (producer) under the SATAT scheme.

HIGHLIGHTS

- SATAT is an initiative aimed at providing a Sustainable Alternative Towards Affordable Transportation as a developmental effort that would benefit both vehicle-users as well as farmers and entrepreneurs.
- SATAT was launched with a four-pronged agenda of utilising more than 62 million metric tonnes of waste generated every year in India, cutting down import dependence, supplementing job creation in the country and reducing vehicular emissions and pollution from burning of agricultural / organic waste.
- Bio-gas is produced naturally through a process of anaerobic decomposition from waste / bio-mass sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc. After purification, it is compressed and called CBG, which has pure methane content of over 90%.
- Compressed Bio-Gas is exactly similar to the commercially available natural gas in its composition and energy potential.
- CBG can be used as an alternative, renewable automotive fuel. Given the abundance of biomass in the country, CBG has the potential to replace CNG in automotive, industrial and commercial uses in the coming years.
- There are multiple benefits from converting agricultural residue, cattle dung and municipal solid waste into CBG on a commercial scale:
 1. Responsible waste management, reduction in carbon emissions and pollution.
 2. Additional revenue source for farmers.
 3. Boost to entrepreneurship, rural economy and employment.
 4. Support to national commitments in achieving climate change goals.

5. Reduction in import of natural gas and crude oil.
6. Buffer against crude oil/gas price fluctuations.

Compressed Bio-Gas plants are proposed to be set up mainly through independent entrepreneurs. CBG produced at these plants will be transported through cascades of cylinders to the fuel station networks of OMCs for marketing as a green transport fuel alternative.

IEA BIOENERGY TCP

Ministry of Petroleum & Natural Gas, Government of India joined IEA Bioenergy TCP as its 25th member on 25th January, 2019.

The other members are Australia, Austria, Belgium, Brazil, Canada, Croatia, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, the Republic of Korea, the Netherlands, New Zealand, Norway, South Africa, Sweden, Switzerland, the United Kingdom, the United States, and the European Commission.

HIGHLIGHTS

- International Energy Agency's Technology Collaboration Programme on Bioenergy (IEA Bioenergy TCP) is an international platform for co-operation among countries with the aim of improving cooperation and information exchange between countries that have national programmes in bioenergy research, development and deployment.
- IEA Bioenergy TCP works under the framework of International Energy Agency (IEA) to which India has "Association" status since 30th March, 2017.
- The primary goal of joining IEA Bioenergy TCP by Ministry of Petroleum & Natural Gas (MoP&NG) is to facilitate the market introduction of advanced biofuels with an aim to bring down emissions and reduce crude imports.
- IEA Bioenergy TCP also provides a platform for international collaboration and information exchange in bioenergy research, technology development, demonstration, and policy analysis with a focus on overcoming the environmental, institutional, technological, social, and market barriers to the near-and long-term deployment of bioenergy technologies.
- The R&D work in IEA Bioenergy TCP is carried out within well-defined 3-years programmes called "**Tasks**".
- Each year the progress of the Tasks is evaluated and scrutinized and each 3 years the content of the Tasks is reformulated and new Tasks can be initiated.
- Technical persons from Public sector Oil Marketing companies will also be contributor in the Tasks participated by MoP&NG.

BENEFITS

- The benefits of participation in IEA Bioenergy TCP are shared costs and pooled technical resources.
- The duplication of efforts is avoided and national Research and Development capabilities are strengthened.
- There is an information exchange about best practices, network of researchers and linking research with practical implementation.
- Engagement with International Agencies will also apprise the Ministry of the developments taking place Worldwide in Biofuel sector, provide opportunity of personal interaction with innovators/ Researchers and help in bringing suitable policy ecosystem.
- In addition, after becoming member, India can participate in other related Tasks focussing on Biogas, Solid waste Management, Biorefining etc. which could be participated by relevant Ministries/ Departments/ Organizations of the Country.

SPECIAL ECONOMIC ZONES ACT, 2005

The Union Cabinet has approved promulgation of an Ordinance to amend the definition of "person", as defined in sub-section (v) of section 2 of the Special Economic Zones Act, 2005 (28 of 2005) to include a trust, to enable the setting up of a unit in a Special Economic Zone by a trust, as also to provide flexibility to the Central Government to include in this definition of a person, any entity that the Central Government may notify from time to time.

BACKGROUND

The present provision of the SEZs Act, 2005 do not permit 'trusts' to set up units in SEZs. The amendment will enable a trust to be considered for grant of permission to set up a unit in SEZs. The amendment will also provide flexibility to the Central Government to include in this definition of a person, any entity that the Central Government may notify from time to time. This will facilitate investments in Special Economic Zones.

JAMMU & KASHMIR RESERVATION (AMENDMENT) ORDINANCE, 2019

The Union Cabinet has approved the proposal of Jammu & Kashmir Government to issue "The Jammu and Kashmir Reservation (Amendment) Ordinance, 2019" by the President of India.

HIGHLIGHTS

- It provides for amendments in the Jammu and Kashmir Reservation Act, 2004 to bringing persons residing in the areas adjoining International Border within the ambit of reservation at par with persons living in areas adjoining Actual Line of Control (ALoC).
- Once the Ordinance is issued, it would pave the way for bringing persons residing in the areas adjoining International Border within the ambit of Reservation at par with persons living in areas adjoining Actual Line of Control.
- 10% reservation for economically weaker sections made applicable in J&K also.
- This would pave the way for reserving State Government jobs to the youth of J&K who are from economically weaker sections belonging to any religion or caste.
- It may be recalled that 10% reservation to economically weaker sections was introduced in rest of the country through the 103rd Constitution Amendment in January 2019. This will be in addition to such reservation available in Govt. of India jobs also.
- Benefit of promotion to Scheduled Castes and Scheduled Tribes, which include Gujjars and Bakarwals amongst others, has also been made applicable to the State of J&K. After a long wait of 24 years, the 77th Constitution Amendment of 1995 has now been applied to the State of J&K.
- People living near the International Border have been brought at par with those living near the Line of Control for reservation in State Government jobs by amending the Jammu and Kashmir Reservation Act, 2004 through an Ordinance. Earlier, the provision of 3% reservation was available only for youth living within 6 kms. Of LoC in J&K.
- Now, this provision will be applicable for people living near the international border also. This has been a long-pending demand of the population living near the international border, as they have been facing the brunt of cross border firing in J&K.

BACKGROUND

The Jammu and Kashmir Reservation Act, 2004 and Rules there under namely The Jammu and Kashmir Reservation Rules, 2005 provide for vertical reservation in direct recruitment, promotions and admission in different professional courses to various categories viz. Scheduled Castes, Scheduled Tribes, Socially and Educationally Backward Classes (Residents of Backward Area (RBA), Residents of Areas adjoining Actual Line of Control (ALoC) and Weak and Under Privileged Classes

(Social Castes) along with horizontal reservation to the Ex-Serviceman and Physically Challenged Persons. However, the reservation benefits are not extended to the persons residing in the areas adjoining International Border.

Due to continuous cross border tensions, persons living alongside International Border suffer from socio-economic and educational backwardness. Shelling from across the border often compels these residents to move to safer places and is adversely impacting their education as Educational Institutions remain closed for long periods. Hence, it was felt justifiable to extend the reservation benefits to persons residing in the areas adjoining International Border on the similar lines of the persons living in areas adjoining Actual Line of Control (ALoC).

NEW DELHI INTERNATIONAL ARBITRATION CENTRE ORDINANCE, 2019

The Union Cabinet has approved promulgation of an Ordinance for establishing the New Delhi International Arbitration Centre (NDIAC) for the purpose of creating an independent and autonomous regime for institutionalised arbitration.

The benefits of institutionalized arbitration will accrue to Government and its agency and to the parties to a dispute. This shall be to the advantage of the public and the public institutions in terms of quality of expertise and costs incurred and will facilitate India becoming a hub for Institutional Arbitration.

OBJECTIVES

The NDAIC shall be established with an aim to:

1. To bring targeted reforms to develop itself as a flagship institution for conducting international and domestic arbitration
2. Provide facilities and administrative assistance for conciliation mediation and arbitral proceedings;
3. Maintain panels of accredited arbitrators, conciliators and mediators both at national and international level or specialists such as surveyors and investigators;
4. Facilitate conducting of international and domestic arbitrations and conciliation in the most professional manner;
5. Provide cost effective and timely services for the conduct of arbitrations and conciliations at Domestic and International level.
6. Promote studies in the field of alternative dispute resolution and related matters, and to promote reforms in the system of settlement of disputes.
7. Co-operate with other societies, institutions and organisations, national or international for promoting alternative dispute resolution.

In order to facilitate the setting up of NDIAC, the Ordinance envisages the transfer and vesting of the undertakings of the ICADR in the Central Government. The Central Government will subsequently vest the undertakings in NDIAC.

HIGHLIGHTS

- New Delhi International Arbitration Centre (NDIAC) will be headed by a chairperson who has been a Judge of the Supreme Court or a Judge of a High Court or an eminent person, having special knowledge and experience in the conduct or administration of arbitration law or management, to be appointed by the Central Government in consultation with the Chief Justice of India.

- There will be two Full time or Part time Members from amongst eminent persons having substantial knowledge and experience in institutional arbitration, both domestic and international.
- Also, one representative of a recognised body of commerce and industry shall be chosen on rotational basis as Part time Member. Secretary, Department of Legal Affairs, Financial Adviser nominated by the Department of Expenditure and Chief Executive Officer, NDIAC shall be ex-officio Members.

FAME INDIA PHASE II

The Union cabinet has approved the proposal for implementation of scheme titled 'Faster Adoption and Manufacturing of Electric Vehicles in India Phase II (FAME India Phase II)' for promotion of Electric Mobility in the country.

- The scheme with total outlay of Rs 10000 Crores over the period of three years will be implemented with effect from 1st April 2019.
- This scheme is the expanded version of the present scheme titled 'FAME India1 which was launched on 1st April 2015, with total outlay of Rs. 895 crores.
- Total fund requirement for this scheme is Rs. 10,000 crores over three years from 2019-20 to 2021-22.
- The main objective of the scheme is to encourage Faster adoption of Electric and hybrid vehicle by way of offering upfront Incentive on purchase of Electric vehicles and also by way of establishing a necessary charging Infrastructure for electric vehicles.
- The scheme will help in addressing the issue of environmental pollution and fuel security.

FACTS

- Emphasis is on electrification of the public transportation that includes shared transport.
- Demand Incentives on operational expenditure mode! for electric buses will be delivered through State/city transport corporation (STUs).
- In 3W and 4W segment incentives will be applicable mainly to vehicles used for public transport or registered for commercial purposes.
- In the e-2Ws segment, the focus will be on the private vehicles.
- Through the scheme, it is planned to support 10 Lakhs e-2W, 5 Lakhs e-3W, 55000 4Ws and 7000 Buses.
- To encourage advance technologies, the benefits of incentives, will be extended to only those vehicles which are fitted with advance battery like a Lithium Ion battery and other new technology batteries.
- The scheme proposes for establishment of charging infrastructure, whereby about 2700 charging stations will be established in metros, other million plus cities, smart cities and cities of Hilly states across the country so that there will be availability of at least one charging station in a grid of 3 km x 3 km.
- Establishment of Charging stations are also proposed on major highways connecting major city clusters.
- On such highways, charging stations will be established on both sides of the road at an interval of about 25 km each.

ARUN-3 HYDRO ELECTRIC PROJECT

The Cabinet Committee on Economic Affairs has approved investment for Transmission Component of Arun-3 Hydro Electric Project (Nepal portion) for an estimated cost of Rs. 1236.13 crore at June 2017 Price level.

The project will provide surplus power to India strengthening economic linkages with Nepal. The power from the project shall be exported from Dhalkebar in Nepal to Muzaffarpur in India.

- The Arun-3 Hydro Electric project (900 MW) is located on Arun River in Sankhuwasabha District of Eastern Nepal.
- The Run-of-River scheme envisages about 70 mtr. high concrete gravity dam and Head Race Tunnel (HRT) of 11.74 Km. with underground Power House containing four generating units of 225 MW each on Left Bank.
- SJVN limited bagged the project through International Competitive Bidding.
- An MoU was signed between Government of Nepal and SJVN Limited for the project in March, 2008 for execution on Build Own Operate and Transfer (BOOT) basis for a period of 30 years including five years of construction period.
- The Project Development Agreement (PDA) signed in November, 2014, which provides 21.9% free power to Nepal for the entire concession period of 25 years.

PRADHAN MANTRI JI-VAN

The Cabinet Committee on Economic Affairs has approved the "Pradhan Mantri JI-VAN (Jaiv Indhan- Vatavaran Anukool fasal awashesh Nivaran) Yojana" for providing financial support to Integrated Bioethanol Projects using lignocellulosic biomass and other renewable feedstock.

HIGHLIGHTS

- The JI-VAN Yojana will be supported with total financial outlay of Rs.1969.50 crore for the period from 2018-19 to 2023-24.
- Under this Yojana, 12 Commercial Scale and 10 demonstration scale Second Generation (2G) ethanol Projects will be provided a Viability Gap Funding (VGF) support in two phases:
 1. Phase-I (2018-19 to 2022-23): wherein six commercial projects and five demonstration projects will be supported.
 2. Phase-II (2020-21 to 2023-24): wherein remaining six commercial projects and five demonstration projects will be supported.
- The scheme focuses to incentivise 2G Ethanol sector and support this nascent industry by creating a suitable ecosystem for setting up commercial projects and increasing Research & Development in this area.
- The ethanol produced by the scheme beneficiaries will be mandatorily supplied to Oil Marketing Companies (OMCs) to further enhance the blending percentage under EBP Programme.
- Ministry of Petroleum & Natural Gas has targeted to achieve 10% blending percentage of Ethanol in petrol by 2022.
- Centre for High Technology (CHT), a technical body under the aegis of MoP&NG, will be the implementation Agency for the scheme.

BACKGROUND

Government of India launched Ethanol Blended Petrol (EBP) programme in 2003 for undertaking blending of ethanol in Petrol to address environmental concerns due to fossil fuel burning, provide remuneration to farmers, subsidize crude imports and achieve forex savings. Presently, EBP is being run in 21 States and 4 UTs of the country. Under EBP programme, OMCs are to blend upto 10% of ethanol in Petrol. The present policy allows procurement of ethanol produced from molasses and non-food feed stock like celluloses and lignocelluloses material including petrochemical route.

NATIONAL MINERAL POLICY, 2019***The Union Cabinet has approved National Mineral Policy 2019.***

The New National Mineral Policy will ensure more effective regulation. It will lead to sustainable mining sector development in future while addressing the issues of project affected persons especially those residing in tribal areas

The aim of National Mineral Policy 2019 is to have a more effective, meaningful and implementable policy that brings in further transparency, better regulation and enforcement, balanced social and economic growth as well as sustainable mining practices.

HIGHLIGHTS

- The National Mineral Policy 2019 includes provisions which will give boost to mining sector such as
 1. introduction of Right of First Refusal for RP/PL holders,
 2. encouraging the private sector to take up exploration,
 3. auctioning in virgin areas for composite RP cum PL cum ML on revenue share basis,
 4. encouragement of merger and acquisition of mining entities and
 5. transfer of mining leases and creation of dedicated mineral corridors to boost private sector mining areas.
- The 2019 Policy proposes to grant status of industry to mining activity to boost financing of mining for private sector and for acquisitions of mineral assets in other countries by private sector.
- The 2019 Policy also introduces the concept of **Inter-Generational Equity** that deals with the well-being not only of the present generation but also of the generations to come and also proposes to constitute an inter-ministerial body to institutionalize the mechanism for ensuring sustainable development in mining.

BACKGROUND

National Mineral Policy 2019 replaces the extant National Mineral Policy 2008 ("NMP 2008") which was announced in year 2008. The impetus to review NMP 2008 came about by way of a direction from the Supreme Court vide its judgment dated 02.08.2017 in Writ Petition (Civil) No. 114/2014 entitled Common Cause v/s Union of India & Others.

MSP FOR MFP

Ministry of Tribal Affairs launched the ambitious scheme of the Ministry of Tribal Affairs, Van Dhan, the scheme for Minimum Support Price (MSP) for Minor Forest Produce Scheme (MFP) and Development of Value Chain of MFPs at a National Workshop organized by TRIFED under Ministry of Tribal Affairs.

HIGHLIGHTS

- Under the scheme "Mechanism for Marketing of Minor Forest Produce through Minimum Support Price and development of Value chain for MFP" Minimum Support Price (MSP) for Minor Forest Produce (MFP) has been fixed for select MFP.
- The scheme is designed as a social safety net for improvement of livelihood of MFP gatherers by providing them fair price for the MFPs they collect.
- The Scheme has been implemented in eight States having Schedule areas as listed in the Fifth Schedule of the constitution of India. From November 2016, the scheme is applicable in all States.

- Any de-nationalized MFP / items removed from the purview of monopoly procurement in future will also qualify for coverage under the Scheme.
- Similarly, any nationalized/ monopolized procurement, MFP will disqualify for coverage under the Scheme. However, if any State willingly wants any nationalized items to be included in MSP, then it shall have to change its nationalized status accordingly.

KAWAL TIGER RESERVE

- Kawal tiger reserve is situated in Northern part of the Telegana state.
- The wildlife sanctuary in Kawal is the catchment area of river Godavari and Kadam.
- The indicator species of the sanctuary are Tiger and Nilgai.
- The reserve forms the southern end of the central Indian Tiger Reserve Landscape.
- It is also linked to the Tadoba Andhari Tiger Reserve in Maharashtra to its north and Indravathi Tiger reserve to its east
- The forest area found here is the southern tropical mixed dry deciduous forest and dry teak forest.

WASTE TO ENERGY (WTE) PLANTS

As per the Union Ministry of Environment and Forests, MSW generation will reach 4.5 lakh TPD by 2031 and 11.9 lakh TPD by 2050.

Nearly half of India's waste-to-energy (WTE) plants, meant to convert non-biodegradable waste, are defunct.

HIGHLIGHTS

- Waste to Energy (WTE), is a term that is used to describe various technologies that convert non-recyclable waste into usable forms of energy including heat, fuels and electricity.
- WTE can occur through a number of processes such as incineration, gasification, pyrolysis, anaerobic digestion, and landfill gas recovery.
- The key reasons for closure are:
 1. The plants' inability to handle mixed solid waste
 2. The high cost of electricity generated by them that renders it unattractive to power companies.
 3. The fundamental reason for the inefficiency of WTE plants is the quality and composition of waste.
 4. MSW (municipal solid waste) in India has low calorific value and high moisture content.

KELP FOREST

- Climate change could lead to declines of underwater kelp forests through impacts on their micro biome.
- It was predicted that ocean warming and acidification can change microbes on the kelp surface, leading to disease and potentially putting fisheries at risk.
- Kelp Forests are underwater ecosystems formed in shallow water by the dense growth of several different species known as kelps.
- Kelps are actually extremely large brown algae, although they look like plants.
- They thrive in cold, nutrient-rich waters.
- Kelp attaches to the seafloor and eventually grows to the water's surface and relies on sunlight to generate food and energy.
- Kelps live further from the tropics than coral reefs, mangrove forests, and warm-water seagrass beds, so kelp forests do not overlap with those systems.

INDIAN ARMY CORPS OF SIGNAL

- The Indian Army Corps of Signals celebrated its 108th Anniversary recently.
- It is an arm of Indian Army and was raised in 1911.
- It is well poised to exploit the state-of-art modern communication techniques for meeting the requirements of the Indian Army in the 21st century.
- Generally, a signal corps is a military branch, responsible for military communications (signals).
- Military communication usually consists of radio, telephone, and digital communications.
- It works closely with Defense Research and Development Organization (DRDO).
- It has developed command and control software, notably Samyukta Electronic Warfare System.

660 KM BOUNDARY

- Usually p & s waves of earthquake are used to study the earth's inner layers.
- Earthquakes that are of magnitude 7.0 or higher send out shockwaves in all directions that can travel through the core to the other side of the planet.
- Just as light waves can reflect off a mirror or refract when passing through a prism, earthquake waves travel straight through homogenous rocks but reflect or refract when they encounter any boundary or roughness.
- Thus, the scattering waves carry the information about the inner layer's roughness.
- Scientists used such data from a magnitude 8.2 earthquake that happened in Bolivia to find mountains and other topography that separates the upper and lower mantle around 660 km straight down.
- Lacking a formal name it is simply called "the 660-km boundary" for now.
- The layer is found to be rougher than the surface layer that we all live on i.e stronger topography than the Rocky/Appalachians is present at the 660-km boundary.
- These mountains could also be bigger than anything on the surface of the Earth.
- Also, just like the presence of both the smooth ocean floors and massive mountains in the crust, the 660-km boundary has rough areas and smooth patches.
- The boundary will have significant implications on our understanding of how our planet was formed and evolved.

NATIONAL SECURITY ACT

National Security Act (NSA) empowers the Centre or a State government to detain a person to prevent him from acting in any manner prejudicial to national security.

As per the National Security Act, the grounds for preventive detention of a person include:

- Acting in any manner prejudicial to the defense of India, the relations of India with foreign powers, or the security of India.
- Regulating the continued presence of any foreigner in India or with a view to making arrangements for his expulsion from India.
- Preventing them from acting in any manner prejudicial to the security of the State or from acting in any manner prejudicial to the maintenance of public order or from acting in any manner prejudicial to the maintenance of supplies and services essential to the community it is necessary so to do.
- The maximum period for which one may be detained is 12 months, but the term can be extended if the government finds fresh evidence.
- In the normal course, if a person is arrested, he or she is guaranteed certain basic rights, these include the right to be informed of the reason for the arrest, right to bail, and arrested person has to be produced before a court within 24 hours of arrest.

- Additionally, Article 22(1) of the Constitution says an arrested person cannot be denied the right to consult, and to be defended by, a legal practitioner of his choice.
- But none of these rights are available to a person detained under the NSA.
- The proceedings of the NSA related cases are handled by an advisory board constituted by the government.

GURU RAVIDAS

- He is a 14th century saint and reformer of the Bhakti movement in North India.
- He was from Varanasi.
- He was the son of a cobbler who gained prominence due to his belief in one God and his unbiased religious poems.
- His devotional songs made an instant impact on the Bhakti Movement.
- Around 41 of his poems were included in 'Adi Granth' or 'Guru Granth Sahib', the religious text of the Sikhs.
- Ravidas dedicated his whole life for the abolition of the caste system and openly despised the notion of a Brahminical society.

NATIONAL CYBER FORENSIC LAB

Union Home Minister inaugurated the National Cyber Forensic Lab and Cyber Prevention, Awareness & Detection Centre (CyPAD) of Delhi Police recently. NCFL is inaugurated under the Indian Cyber Crime Coordination Centre (i-4C).

- i-4C deals with cyber-crimes such as financial frauds, circulation of communal and pornographic contents.
- NCFL will have equipment's to deal with memory forensics, image enhancement, crypto currency forensics, recovery of damaged hard drive and advanced mobile forensics.
- The lab will also function as an all-India base to deal and coordinate with cyber threats, where nation- wide information will be generated and stored at the National Cyber Reporting Portal.
- State police units will have access to the facilities and can get their forensic samples analyzed.

GLOBAL GO TO THINK TANK INDEX REPORT

Observer Research Foundation (ORF) has been named the highest ranked Indian think tank in the "2018 Global Go To Think Tank Index Report".

- Globally the US-based Brookings Institution is the highest ranked think tank, followed by the French Institute of International Relations and the Carnegie Endowment.
- The report is published by Think Tanks and Civil Societies Program, The Lauder Institute, University of Pennsylvania.
- The largest number of think tanks in 2018 are from the US (1,871) followed by India (509) and China (507).
- Japan and South Korea have 128 and 60 think tanks respectively.
- The ranking was based on several parameters such as
 1. quality and reputation of research and analysis produced.
 2. academic performance and reputation.
 3. quality, number, and reach of publications.
 4. impact of research on policy makers.

SPHEREx

NASA will launch a new space telescope in 2023 called SPHEREx.

- It would provide a glimpse of the first moments in the history of the universe, and explore how common are the ingredients for life in our galaxy's planetary system.
- SPHEREx is the Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer.
- NASA plans it as a two-year mission.
- It will survey the sky in optical as well as near-infrared light which serves as a powerful tool for answering cosmic questions.

INTERNATIONAL INTELLECTUAL PROPERTY INDEX

- The index was prepared by the US Chamber of Commerce's Global Innovation Policy Center (GIPC).
- It ranks countries based on 45 indicators that are critical to an innovation-led economy supported by robust patent, trademark, copyright, and trade secrets protection.
- The Index analyses the IP climate in 50 global economies.
- The US, the UK, Sweden, France and Germany remained the top five economies on the intellectual property index in 2019.
- India ranks 36 in the IP Index
- India's has jumped from 44th position in 2018.
- According to the index report, the key problems in India include
 1. barriers to licensing and technology transfer
 2. strict registration requirements
 3. limited framework for the protection of bio-pharmaceutical IP right
 4. patentability requirements outside international standards

SAMADHAN PORTAL

The Union government has launched Samadhan portal to help workers and employers raise industrial disputes online.

- Samadhan stands for Software Application for Monitoring and Disposal, Handling of Industrial Disputes.
- It is a dedicated web portal to bring all stakeholders - government, industry, and labor - involved in industrial disputes on a single integrated platform.
- The bodies which help in resolving the disputes – office of chief labour commissioner (central), industrial relations division, and central government industrial tribunal (CGIT)– will be able to get the requests and send updates to workers and employers on this portal.
- It has been launched on a pilot basis for workers belonging to five states – Chhattisgarh, Delhi, Karnataka, Rajasthan, and Odisha.
- Under the Industrial Disputes Act, 1947, an industrial dispute is defined as any dispute or difference between employers and employees or amongst a group of workers or employers related to employment, termination, and condition of work, among others.
- The web portal will make the process of settling industrial disputes is simplified, standardized and streamlined.

INVESTIGATION TRACKING SYSTEM FOR SEXUAL OFFENCES (ITSSO) PORTAL

Investigation Tracking System for Sexual Offences (ITSSO) and Safe City Implementation Monitoring Portal was also launched.

- It is meant for the law enforcement agencies in the country.
- The system is an online module available to law enforcement agencies at all levels - national, state, district and police station.

- It allows the state to undertake real-time monitoring and management for completion of investigation in rape cases.
- It would also strengthen the ability of states for analytics and prognosis for timely investigation and prosecution in rape cases.

BRAMBLE CAY

- Australia officially declared a Great Barrier Reef rodent called Bramble Cay melomys extinct recently.
- A Cay is a low-lying island on a coral reef.
- It became the first mammal believed to have been killed off by human-induced climate change.
- The rodent lived solely on a tiny sand island in the Torres Strait, near the coast of Papua New Guinea.
- The species has not been seen since 2009.
- A key factor in its disappearance was repeated ocean inundation of the cay over the last decade, which had resulted in dramatic habitat loss.
- The Melomys rubicola is considered the Great Barrier Reef's only endemic mammal species.
- It was first discovered on the cay in 1845 by Europeans who shot the large rat for sport.
- According to International Union for Conservation of Nature (IUCN), Australia has one of world's highest rates of animal extinction.

GREAT WHITE SHARK

A major study decoded Great White Shark entire genome and found that it could hold new clues to the fight against cancer.

- The great white shark is also known as the great white, white shark or white pointer.
- It is one of the most powerful and dangerous predatory sharks in the world.
- They are a large shark and grow up to at least 20 feet long, or 6.1 meters.
- They are frequently centred in highly productive temperate coastal waters.
- It the only known surviving species of its genus Carcharodon.
- According to IUCN, the species is classified as vulnerable.

NICRA

National Innovations on Climate Resilient Agriculture (NICRA) is a network project of the Indian Council of Agricultural Research (ICAR) launched in, 2011.

- The project aims to enhance resilience of Indian agriculture to climate change and climate vulnerability through strategic research and technology demonstration.
- The research on adaptation and mitigation covers crops, livestock, fisheries and natural resource management.
- The project consists of four components viz.
 1. Strategic Research.
 2. Technology Demonstration.
 3. Capacity Building.
 4. Sponsored/Competitive Grants.

INDIA'S TRILLION DOLLAR DIGITAL ECONOMY REPORT

India's Trillion-Dollar Digital economy is a new report released by Ministry for Electronics and Information Technology (MEITY).

- The report finds that India can create up to \$1 trillion of economic value from the digital economy in 2025, with about half of the opportunity originating in new digital ecosystems that can spring up in diverse sectors of the economy.
- Currently, India's digital economy generates about \$200 billion of economic value.

HOPE PORTAL

National Accreditation Board for Hospitals and Healthcare Organizations (NABH) has introduced an online portal called HOPE.

- HOPE - Healthcare Organizations' Platform for Entry-Level-Certification aims to promote quality at nascent stages by enrolling a wide range of hospitals across the country including Healthcare Organizations (HCOs) and Small Healthcare Organizations (SHCOs).
- It tries to create a momentum for HCOs and SHCOs that want to avail benefits associated with Insurance Regulatory and Development Authority of India (IRDAI) and Ayushman Bharat by getting themselves NABH certified.
- The IRDAI has mandated hospitals to ensure a quality healthcare ecosystem through NABH Entry-Level Certification Process.

NABH

- NABH, a constituent body of QCI, has been working to ensure reliability, efficiency and global accreditation in Indian healthcare sector using contemporary methodologies and tools, standards of patient safety and infection control.
- NABH accreditation provides assurance of quality and care in hospitals at par with international benchmarks.
- NABH has designed an exhaustive healthcare standard for hospitals and healthcare providers that have been accredited by ISQUA the apex international accreditation body.

Quality Council of India

- Quality Council of India (QCI) is an autonomous organization under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, established in 1997.
- It is the Quality Apex and National Accreditation Body for accreditation and quality promotion in India.
- The Council was established to provide a credible, reliable mechanism for third party assessment of products, services and processes which is accepted and recognized globally.

MYCETOMA DISEASE

Recently group of experts from WHO called for a combined action to address Mycetoma disease.

- Mycetoma is a disease characterized by disabling deformities and associated with severe morbidity.
- It is an inflammatory disease of the skin, connective tissue, muscle and bone, results from infection caused by more than 70 bacterial or fungal microorganisms.
- The tropical disease is known to affect rural populations, particularly those who walk barefoot, like agricultural laborers and herdsmen.
- If not detected and managed early, this disease can cause limb deformity and, in advanced cases, lead to amputation and death.

TELE-LAW & NYAYA BANDHU

Tele-Law (mobile application and dashboard) and Nyaya Bandhu (mobile application) were launched recently by Department of Justice (DoJ), Ministry of Law and Justice.

HIGHLIGHTS

- Tele-Law is about mainstreaming Legal Aid through Common Service Centers while Nyaya Bandhu is about Pro Bono Legal Services (Free Legal Services).
- The tele-law services across the country provide every litigant access to free legal aid services.
- The Nyaya bandhu app service was developed to accelerate and facilitate practicing advocates to register and connect with the registered eligible beneficiaries.
- Both the programs are aimed at fulfilling the State's constitutional obligation of providing "free legal aid" for all (Article 39A).

GRAVEYARD ORBIT

- It is a higher orbit where the satellites are transferred to, after they reach the end of their mission.
- It is mostly used for the disposal of geostationary satellites that orbit directly above Earth's equator at a height of 35,786 kilometers.
- It usually lies 300km above the geostationary orbit.
- This is done to prevent collisions with other operational satellites and also to make space for new satellites in the geostationary orbit.

ALL INDIA CITIZENS SURVEY OF POLICE SERVICE

Ministry of Home Affairs has commissioned the Bureau of Police Research and Development to conduct a pan-India survey called "All India Citizens Survey of Police Services".

The survey will be conducted through the National Council of Applied Economic Research, New Delhi.

The survey is aimed:

- To understand public perceptions about Police.
- To gauge the level of non-reporting of crimes or incidents to Police.
- To assess the position on ground relating to crime reporting & recording, timeliness and quality of police response and action.
- To assess citizens' perception and experience about women and children's safety.

FERNANDINA GIANT TORTOISE

- It is a rare Giant Tortoise (*Chelonoidis phantasticus*).
- It was feared to be extinct but has been found in a remote part of the Galapagos island of Fernandina recently.
- The IUCN listed it as critically endangered & possibly extinct.
- Its habitat is largely dry brush land at lower elevations, but much of that habitat has been destroyed by extensive lava flows.
- Fernandina is the third largest Galapagos Island and features the La Cumbre volcano, one of the most active in the world.

AEROBICS 150

- Physical inactivity is identified as the fourth leading risk factor for global mortality.

- It leads to prevalence of non-communicable diseases (NCDs) and the general health of the population.
- It is also estimated to be the main cause for approximately 21%-25% of breast and colon cancers and 27% of diabetes.
- So, WHO has prescribed 150 minutes of weekly physical activity to reduce the risk of hypertension, improve bone and functional health.

PADAYANI

- It is a ritual art and folk dance form performed at Bhadrakali temples in the state of Kerala.
- The word 'Padai-ani' means line-up or formation of the soldiers.
- The story behind Padaiyani is the re-enactment of the killing of Demon Darika and calming the Goddess Kali after it.
- The following are the essential parts of Padaiyani.
 1. Kolams - Folk deities drawn on green areca leaf sheaths with natural colours.
 2. Kolappattu - Songs in admiration of Bhagavathi,
 3. Kolam thullal - Rhythmic footsteps and dance.
 4. Vinodam - Satire, protesting social evils.
 5. Velichappadu - a comedy character, and
 6. Paradeshi - a character that bring news from around the world
- The dance is to appease the Goddess so that there is eradication of social evils and there is rain, good crop and prosperity.

START-UP RANKING FRAMEWORK

Department for Promotion of Industry and Internal Trade (DPIIT) has released the 2nd edition of Start-up Ranking framework for 2019.

HIGHLIGHTS

- The framework aims to rank the States/UTs for establishing a robust ecosystem for supporting Start-ups.
- It also encourages States and UTs to identify, learn and replicate good practices from each other.
- It comprises of 7 pillars that evaluates States'/UTs efforts across:
 1. Institutional support.
 2. Simplifying regulations.
 3. Easing public procurement.
 4. Incubation support.
 5. Seed funding support.
 6. Venture funding support.
 7. Awareness and outreach related activities.
- The States and Union Territories will be evaluated based on the reforms submitted based on these accounts and ranking will be released soon.

CERVICAL CANCER IN INDIA

A global analysis in The Lancet Oncology report estimated that India can eliminate cervical cancer by 2079.

- It is a cancer that develops in a woman's cervix i.e the lower part of the uterus in the human female reproductive system.
- It is nearly always caused by infection with human papillomavirus (HPV).

- It is the second most common cancer among women, after breast cancer.
- India has planned to introduce human papilloma virus (HPV) vaccine in the government program by 2020.

WALLACE'S GIANT BEE (MEGACHILE PLUTO)

- It is the world's largest bee that was rediscovered in a remote part of Indonesia.
- Wallace's giant bee was discovered in the 19th century by British naturalist Alfred Russel Wallace.
- The IUCN Red List of Threatened Species lists the bee as "vulnerable".
- It was nicknamed the "flying bulldog" as it is nearly four times bigger than the European bee.
- It lives in the Indonesian island region of North Moluccas and makes its nest in termite mounds

GITA GOVINDA

Victoria Memorial Hall in Kolkata has put on display a handwritten 18th-century copy of Gita Govinda to mark the International Mother Language Day.

- It is written in Sanskrit by Jayadeva.
- It is an important text of the Bhakti Movement and dates back to the 12th century.
- It depicts the relationship between Lord Krishna and Radha.
- It was also the inspiration for many beautiful miniature paintings of the Rajasthani and Pahari schools in the 17th and 18th centuries.

HAYABUSA 2 & RYUGU ASTEROID

- Hayabusa 2 is a Japanese probe sent to collect samples from an asteroid for clues about the origin of life and the solar system.
- It fired a bullet into the surface of the Ryugu asteroid.
- The Ryugu asteroid is thought to contain relatively large amounts of organic matter and water from some 4.6 billion years ago when the solar system was born.
- It was launched in December 2014 and is scheduled to return to the Earth with its samples in 2020.
- The probe will observe the surface of the asteroid with its camera and sensing equipment.

NATIONAL ACTION PLAN-VIRAL HEPATITIS

- It was launched by Union Ministry Health & Family Welfare.
- In India, it is estimated that there are 4 crore people suffering from Hepatitis B and 0.6-1.2 crore people suffering from Hepatitis C.
- It provides a strategic framework, based on which National Viral Hepatitis Control Program was framed and launched under National Health Mission.
- The aim of the program is to:
 1. Combat hepatitis and achieve countrywide elimination of Hepatitis C by 2030
 2. Achieve significant reduction in the infected population, morbidity and mortality associated with Hepatitis B, C, A and E.
 3. In India, Hepatitis B vaccine was introduced in the Universal Immunization Program a decade ago.

FLAMINGO COUNT

- It is the counting of flamingos that will be taken up across the country for the first time.
- It is undertaken by Bombay Natural History Society (BNHS) in collaboration with NGOs and local birdwatchers across the country.

- In India there are two species of flamingos — Greater Flamingo - *Phoenicopterus rosues* and Lesser Flamingo - *Phoeniconaias minor*.
- The taller of the two species is the greater flamingo.
- Lesser flamingos are more pink in colour and their legs are shorter.
- Greater flamingos have light pink beaks with a dark tip which are widespread in India
- It will migrate to South India during winter and spend their time in large reservoirs and mud flats.

MIRAGE 2000 FIGHTER JET

Indian Air Force Mirage 2000 fighters were used to destroy the Jaish-e-Mohammad camps at Balakot along the Line of Control.

HIGHLIGHTS

- It is a French multirole, single-engine fourth-generation fighter jet.
- It is manufactured by Dassault Aviation.
- It gained prominence after their remarkable success rate in the 1999 Kargil war.
- It has a maximum climbing speed of 60,000 feet per minute and is designed for all weather penetration at low altitude.

NATIONAL WAR MEMORIAL

The National War Memorial was inaugurated at New Delhi adjoining the India Gate recently.

- It commemorates those personnel who participated in and lost their lives in peace-keeping missions and counter-insurgency operations.
- It pays tribute to soldiers who laid down their lives during India-China war in 1962, Indo-Pak wars in 1947, 1965 and 1971, Indian Peace Keeping Force Operations in Sri Lanka and in the Kargil conflict of 1999.
- The layout of the structure comprises four concentric circles, named the Amar Chakra, Veerta Chakra, Tyag Chakra and Rakshak Chakra.
- It also includes a central obelisk, an eternal flame and six bronze murals depicting famous battles fought by Indian Army, Air Force and Navy in a covered gallery (Veerta Chakra).
- The busts of 21 awardees of the Param Veer Chakra are installed at the Param Yoddha Sthal.
- The memorial has been moulded as a national centre for civilian engagement and reverence for the forces.

5G LIVING LABS

Infosys has launched new 5G living labs.

- It aims to help enterprises imagine and create new business models
- It helps Communication Service Providers (CSPs) accelerate and monetize their 5G network deployment.
- 5G will transform network capabilities bringing in opportunities for network virtualization, AI and automation.
- More importantly, 5G will enable enterprises usher in innovation, create new experiences and improve operational efficiency.

ANGKOR

According to a study Angkor has suffered a gradual decline rather than a catastrophic collapse.

- It is one of the most important archaeological sites in Cambodia's northern province of Siem Reap, South-East Asia.
- It is the ancient capital of the Khmer empire.
- Angkor Archaeological Park contains the magnificent remains of the different capitals of the Khmer Empire, from the 9th to the 15th century.
- They include the famous Temple of Angkor Wat and, at Angkor Thom, the Bayon Temple with its countless sculptural decorations.

PHEN WILDLIFE SANCTUARY

- It is a popular buffer zone of Kanha national park, Madhya Pradesh.
- It lies in Southern region of Kanha tiger reserve, close to Madhya Pradesh and Chhattisgarh state borders.
- It was declared as a wildlife sanctuary in year 1983 by Government of Madhya Pradesh.
- The Fauna at this sanctuary mainly consists of the Tiger, Leopard, Wild boar, Cheetal, Sambar etc

CARBAMAZEPINE

Concentrations of pharmaceuticals have increased in freshwater sources all over the world over the past 20 years.

- The environmental risks of Carbamazepine and ciprofloxacin were found to be 10 to 20 times higher in 2015 than in 1995.
- Carbamazepine is an anti-epileptic drug and ciprofloxacin is an antibiotic.
- The concentrations of these antibiotics can be harmful for bacteria in the water
- These bacteria found in the fresh water in turn play an important role in various nutrient cycles.
- It provides an insight into the environmental risks posed by pharmaceuticals all over the world.

QRSAM

The indigenously developed Quick Reaction Surface-to-Air missile (QRSAM) was successfully test fired from ITR Chandipur, off the Odisha Coast.

- It has been developed by the Defence Research and Development Organisation (DRDO) for the India Army.
- It has a strike range of 30 km and is capable of engaging multiple targets.
- It uses solid fuel propellant.
- It is an all-weather weapon system that is capable of tracking and firing with precision.
- It is also an all-terrain missile with electronic counter measures against jamming by aircraft radars.

MARINE CLOUDS

- Marine clouds could break up and vanish if CO₂ in the atmosphere triples.
- It protects us from hothouse Earth conditions by reflecting sunlight back into space.
- It is the stratocumulus clouds that cover about 20 % of subtropical oceans, mostly near western seaboards such as the coasts of California, Mexico and Peru.
- These clouds cool and shade the earth as they reflect the sunlight that reflects them back into space
- Due to the rise in Carbon Dioxide it may become unstable and disappear.
- The consequence will trigger a spike in global warming.

FOREST COVER

The Ministry of Environment, Forest & Climate Change defines 'forest cover' in India as "all lands, more than one hectare in area with a tree canopy density of more than 10%"

HIGHLIGHTS

- Similarly, 'tree cover' is defined as "tree patches outside recorded forest areas exclusive of forest cover and less than the minimum mappable area of 1 hectare".
- There is a third measure known as Tree outside forest (TOF).
- The 'India State of Forest Report 2017' defines TOF as "trees existing outside the recorded forest area in the form of block, linear & scattered size of patches".
- Since tree cover measures only non-forest patches that are less than 1 hectare, it is only a part of TOF.
- Based on satellite data analysis, the biennial assessment – conducted by the Forest Survey of India (FSI) and released by the Ministry of Environment, Forest and Climate Change (MoEFCC) – has put the total forest and tree cover at 802,088 square km, which is 24.39 percent of the geographical area of the country.
- The total forest cover is 708,273 square km, which is 21.54 percent of the total area of the country.
- India targets bringing 33 percent of its geographical area under forest cover. As many as 15 states and union territories (UTs) have forest cover exceeding 33 percent of their geographical area. Out of these, seven states have more than 75 percent forest cover while eight states have forest cover between 33 percent and 75 percent.
- In terms of area, Madhya Pradesh has the largest forest cover of 77,414 square km in the country, followed by Arunachal Pradesh with 66,964 square km and Chhattisgarh with 55,547 square km. However, these states have reported a decline in forest cover.
- On the basis of percentage of forest cover with respect to the total geographical area, Lakshadweep (with 90.33 percent) has the highest forest cover, followed by Mizoram (86.27 percent) and Andaman & Nicobar Islands. (81.73 percent).

ARABIAN DESERT

- The Arabian Desert is the largest desert of Asia and covers a major portion of Arabian Peninsula.
- The largest part of the desert lies in Saudi Arabia.
- It also covers neighboring countries such as Yemen, Oman, United Arab Emirates, Kuwait, Qatar, Iraq and Jordan
- Rub'al-Khali, which makes up the most part of this desert, is the largest continuous area of sand in the world.
- Numerous desert insects, including mosquitoes, fleas, ants, termites, beetles, locusts, spiders, butterflies and caterpillars dominate the landscape.

FENI

- It is popular local traditional brew (liquor) distilled from the cashew fruit.
- Cashew feni was given the Geographical Indication tag as manufactured goods.
- The name feni is derived from Sanskrit word 'phena' meaning froth or foam.
- It is also distilled from fermented toddy from coconut palm.
- It is prepared in a typical Portuguese way that does not entail the use of electricity in the process.

IORA MEET

The Ministry of External Affairs (MEA) in collaboration with the Ministry of Home Affairs (MHA), National Disaster Management Authority (NDMA) has organized a meeting of Indian Ocean Rim Association (IORA) Cluster Group on Disaster Risk Management (DRM).

HIGHLIGHTS

- It was organized to strengthen cooperation in disaster response. o Participants at the meet drew a draft work plan for DRM in IORA and deliberated on the need for establishing a DRM Core Group to take forward the agreed objectives under the Work Plan.
- IORA is an intergovernmental organisation and has many disaster-prone countries among its 22 members and nine dialogue partners.
- Disaster Response Management (DRM) is one of its priority areas and its Action Plan (2017-2021) has specific goals to improve resilience in IORA countries.

AFGHANISTAN BEGINS EXPORT TO INDIA

Afghanistan Begins Exports to India Through Iran's Chabahar Port.

HIGHLIGHTS

- This is the first time Afghanistan has exported goods to India bypassing the Pakistan route. o Twenty-three trucks carrying 57 tonnes of dried fruits, textiles, carpets and mineral products were dispatched from the western Afghan city of Zaranj to Chabahar in Iran.
- The consignment will be shipped from Chabahar to Mumbai.
- Iran's Chabahar port is located on the Gulf of Oman and is the only oceanic port of the country.

IOC SUSPENDS INDIA FROM HOSTING INTERNATIONAL SPORTS EVENTS

IOC Suspends India From Hosting International Sports Events o International Olympic Committee (IOC) has suspended India from hosting sporting events.

- The issue arose when India refused visa requests from two Pakistan shooters expected to participate in the ongoing ISSF World Cup.
- The India event from February 20 to 28 serves as the first of eight ISSF World Cups, which also serve as qualifiers for the 2020 Olympic Games.
- According to IOC, this move was against the fundamental principles of the Olympic Charter, in particular the principles of non-discrimination.
- In a similar turn of events, the 2015 Asian Shooting Championships in Kuwait lost its qualification status for the Rio Olympics after an Israeli delegate was denied a visa.
- Last month, the International Paralympic Committee stripped Malaysia of the right to host the 2019 World Para-Swimming Championships after the country banned Israeli athletes from participating.

DEFENCE INNOVATION HUB

The Innovations for Defence Excellence (iDEX) framework of the Government envisages setting up and managing independent Defence Innovation Hubs (DIHs).

- iDEX has announced setting up of two DIHs in Tamil Nadu (Coimbatore) and Maharashtra (Nashik).
- These hubs will serve as platforms where innovators can get information about needs and feedback from the Services directly and create solutions for India's major defence platforms.

- This structure is also geared towards attracting more innovators to work for the defence sector in India.
- The Defence Innovation Organisation is a not for profit company funded by Hindustan Aeronautics Limited (HAL) and Bharat Electronics Limited (BEL) with its headquarter at Bengaluru.
- iDEX functions as an executive arm of The Defence Innovation Organisation, and aim to create an ecosystem to foster innovation and technology development in Defence and Aerospace.

EXERCISE VAYU SHAKTI

The Indian Air Force carried out a mega exercise in a firepower demonstration close to the border with Pakistan at Pokhran.

- The IAF showcased firepower capability of indigenously-developed platforms like Light Combat Aircraft (LCA) Tejas, Advanced Light Helicopter (ALH) and efficacy of Akash surface-to-air missile and Astra air-to-air missile.
- Vayu Shakti and Gagan Shakti are two important exercises held by Indian Airforce.
- While Vayu Shakti demonstrates the IAF's ability to strike targets on the ground, exercise Gagan Shakti focusses on air to air combat.

YSMS

A peer-to-peer software service o Intelligence agencies in J&K suspect that Jaish-e-Muhammed handlers of the Pulwama bomber had been using a peer-to-peer software service - YSMS - or a similar mobile application to correspond with him.

- The YSMS uses an ultra-high radio frequency model to send encrypted text messages.
- In essence, a radio set is attached to a cellular phone with no SIM card inside it.
- The radio set is a small transmitter with WiFi capability. It is the WiFi that is used to connect the mobile.
- The receiver should be in "line of sight" from sender's phone for proper communication.
- YSMS application has been available on the Dark Web since 2012.
- However, terror outfits in Pakistan have now developed a new version which uses a frequency which has not been detected by any monitoring device since December.

SECTION 79 OF IT ACT, 2000

Recently, the Rules notified under Section 79 of the Information Technology (IT) Act, 2000 by the Ministry of Electronics and Information Technology (MeitY) ask for greater due diligence from intermediaries on the regulation of the content they host.

HIGHLIGHTS

- The Rules make intermediaries such as Facebook, Google, WhatsApp, and others responsible for actively monitoring the content they host.
 - Provisions of The Intermediaries Guidelines (Amendment) Rules, 2018:
1. **Tracing of Information:** The Rules ask the intermediaries to allow the tracing of information on their platforms by government agencies, a requirement that could create difficulties in the India operations of global end-to-end encrypted products like WhatsApp or Signal.
 2. **Use of Tech:** All intermediary companies will have to deploy technology based automated tools or appropriate mechanisms, with appropriate controls, for proactively identifying and removing or disabling public access to unlawful information or content.

3. **Type of Content Monitoring:** In addition to the earlier stipulation about content that is grossly harmful, defamatory, obscene, etc., they must now also filter content that threatens public health or safety; promotion of cigarettes or any other tobacco products or consumption of intoxicant including alcohol and Electronic Nicotine Delivery System (ENDS) & like products that enable nicotine delivery.
4. **Timeline:** The new Rules say that if there is a lawful order, then intermediary shall, within 72 hours of communication, provide such information or assistance as asked for by any government agency or assistance. The lawful order could be in matters of state security, cyber security and investigation of any offence.
5. **Registration in India:** All players with more than 5 million users in India have to be incorporated under the Companies Act. The companies will need to have a permanent registered office in India with a physical address. Also, these norms, although currently applicable to only the 5 million plus firms, can be extended to any intermediary, which is specifically notified by the Government of India.

DELHI'S ZERO FATALITY CORRIDOR

The Delhi government has launched a pilot project of creating Delhi's first 'zero fatality corridor' while issuing actionable points to all agencies to ensure a 10% reduction in road accidents by the end of the year.

- The initiative will be run in partnership with Save LIFE Foundation, a leading road safety non-profit.
- The Save LIFE Foundation's ZFC model is well-known for reducing road crash deaths by 30 per cent on the Mumbai-Pune Expressway.
- The activity is in line with Delhi government's plan of action to reduce fatalities due to road crashes by 30 per cent by 2020.
- It binds all agencies — transport, public works department, health, education and Delhi traffic police — to a year-round set of actions to reduce road fatalities in Delhi.
- After evaluating the impact of the initiative, the plan is to replicate the model in other parts of the city. Provisions of The Plan.
- The plan includes conducting a host of audits such as studying and identifying unsafe roads, transportation of school children, road signage, emergency care service and enforcement activities of agencies.
- The plan also calls for commissioning road safety audit of top 20 accident prone zones in the city. Such zones are placed around 500 metre diameter having three fatal or total 10 accidents.
- The district magistrates will ensure footpaths are continuous and encroachment-free and an action taken report will have to be submitted by all DMs monthly, at the same time the road safety cell will also contribute in improving traffic engineering.
- It also provides for a Road Safety Fund to be maintained through 50 per cent of the fine money realised by the Transport department's enforcement wing and traffic police. Estimated to be around Rs 90 crore annually, the fund will be used to implement road safety measures including infrastructure development and improvements.

WOMEN'S LIVELIHOOD BOND

World Bank, UN Women, and Small Industries Development Bank of India (SIDBI) have joined hands to launch a new social impact bond exclusively for women, called Women's Livelihood Bond (WLB), with an initial corpus of Rs 300 crore.

HIGHLIGHTS

- SIDBI will act as the financial intermediary and channel funds raised to women entrepreneurs through participating financial intermediaries like banks, NBFCs or microfinance institutions.
- The proposed bond will enable individual women entrepreneurs in sectors like food processing, agriculture, services and small units to borrow around Rs 50,000 to Rs 3 lakh at an annual interest rate of around 13-14 per cent or less and will have a tenure of five years.
- The WLBs will be unsecured, unlisted bonds and offer fixed coupon rate of 3 per cent per annum to bond investors. Some of the top wealth management firms like Centrum, ASK, Ambit and Aditya Birla Capital, among others, have reached out to high net worth individuals and impact investors to raise the funds.
- A corpus fund catalysed with support from the UK Department for International Development plus future CSR and other grant money will be created to support implementation of the WLB, capacity building of women entrepreneurs including links to markets and appropriate technologies, as well for credit default risk mitigation.
- The new bonds will not only enable women self-help groups to graduate from 'group borrowing' to 'individual borrowing' but will also allow them to shift from development assistance towards more market-financed programmes.

NATIONAL DEWORMING DAY

The Ministry of Health and Family Welfare (MoHFW) recently conducted its eighth round of National Deworming Day (NDD).

HIGHLIGHTS

- It is implemented with an objective to reduce the prevalence of Soil Transmitted Helminths (STH) or parasitic intestinal worms (which affect over 241 million children in India every year), so that they are no longer a public health problem.
- STH or parasitic worms are among the most common infections worldwide. It lives in human intestines and consume nutrients meant for the human body. They produce thousands of eggs each day, which are passed in faeces and spread to others in areas used for public toilet.
- NDD is observed bi-annually on 10th February and 10th August in all states and UTs followed by mop-up activities.
- The campaign was launched in February 2015 as a part of National Health Mission with the aim to deworm all the children from 1 to 19 years of age. It has emerged as world's largest public health campaign preventing children from intestinal parasitic worms.
- The program is implemented with the Ministries of Women and Child Development and Human Resource Development, where the anganwadi workers and teachers administer the deworming medicine to children and adolescents at the anganwadis and schools.
- ASHA workers support the efforts through community mobilization and sensitization of communities about the ill effects of worm infestations.
- There are a variety of parasitic worms that can reside in the human body. The five most common types of worms are tapeworms, hookworms, flukes, threadworms and trichinosis worms.
- Worm infection interferes with the nutrient uptake of kids and can make children anaemic, malnourished, weak, sick and tired with poor concentration.
- Using Albendazole tablet for deworming is an evidence-based, globally-accepted, and effective solution used to control worm infections in all children, regardless of socio-economic background. Success

SKILL SAATHI YOUTH CONCLAVE

Union Ministry of Skill Development and Entrepreneurship (MSDE) recently organized the Skill Saathi Youth Conclave in Odisha, to create awareness about various programs under Skill India Mission

HIGHLIGHTS

- Skill Saathi is a career counselling initiative of the National Skill Development Corporation, under the aegis of MSDE, to guide candidates by providing them with information on career paths and opportunities.
- Skill Saathis provide information on vocational education and available market opportunities, facilitate psychometric testing and conduct face-to-face counselling interventions to guide aspirants to make the right choice of training and subsequent employment/entrepreneurship.
- The qualitative counselling sessions aim to counsel candidates in the age group of 15 – 35 years and steer them towards becoming ‘Empowered Drivers of Change’.
- The focus lies on school and college students along with dropouts, young adults from the community, students from colleges, polytechnic, ITI, diploma-holders, graduates and post-graduates.

JALLIANWALA BAGH NATIONAL MEMORIAL (AMENDMENT) BILL, 2018

The Jallianwala Bagh National Memorial (Amendment) Bill, 2018 was recently passed in Lok Sabha.

The bill aims to address various deficiencies in the management of the National Memorial and to ensure that the Trust is an apolitical entity.

HIGHLIGHTS

- The 2018 amendment bill removes the President of the Indian National Congress as a Trustee.
- It clarifies that when there is no Leader of Opposition in Lok Sabha, the leader of the single largest opposition party in the Lok Sabha will be the Trustee.
- The 1951 act provided that the three eminent persons nominated by the central government will have a term of five years and will be eligible for re-nomination.
- The 2018 bill added a clause to allow the central government to terminate the term of a nominated trustee before the expiry of his term without assigning any reason.

BACKGROUND

Jallianwala Bagh National Memorial Act, 1951 provided for the erection of a National Memorial in memory of those killed or wounded on April 13, 1919, in Jallianwala Bagh, Amritsar.

The 1951 Act also provided for a Trust to manage the National Memorial. The Trust as per the 1951 Act included the Prime Minister, as Chairperson, (ii) the President of the Indian National Congress, (iii) the Minister in-charge of Culture, (iv) the Leader of Opposition in Lok Sabha, (v) the Governor of Punjab, (vi) the Chief Minister of Punjab, and (vii) three eminent persons nominated by the central government.

MARS MISSION ‘OPPORTUNITY’

The National Aeronautics and Space Administration (NASA) announced that its Mars Mission, Opportunity has come to an end.

- Opportunity was the second of the twin Mars Exploration Rovers to land on Mars in January 2004.

- It landed 90 days after its twin rover Spirit landed. Spirit landed at Gusev Crater and Opportunity landed on the opposite side of Mars at Meridiani Planum.
- NASA expected 90-day lifetimes for the rovers. Both Opportunity and Spirit far exceeded their expected lifetime.
- Spirit's mission ended in May 2011 after travelling eight kilometres and Opportunity had logged 45 kilometres before losing contact in June 2018.

INDIA'S 1ST DISTRICT COOLING SYSTEM

India's First District cooling system will come up in Amravati, capital of the Andhra Pradesh.

HIGHLIGHTS

- District cooling systems produce chilled water, steam or hot water at a central plant and then pipe that energy out (either underground or over rooftops) to buildings for air conditioning, space heating and water heating. As a result, these buildings don't require their own chillers, air conditioners, boilers or furnaces.
- They are considered to be highly efficient to address each of the challenges like high Capital and operating costs, reliability, flexibility and environmental sustainability while meeting their comfort and process cooling and heating needs.
- District cooling uses only 50% of primary energy consumption for cooling urban building n compared to other cooling systems. This also reduces carbon emissions.

REVITALISING RAINFED AGRICULTURE NETWORK

A new rainfed agriculture atlas has been released recently. It has been released by Revitalising Rainfed Agriculture (RRA) Network.

The atlas not only maps the agro biodiversity and socio-economic conditions prevailing in such areas, but also attempts to document the policy biases that are making farming unviable for many in these areas.

FATEH SUBMARINE

- It is a "state-of-the-art" domestically produced Iranian submarine capable of firing cruise missiles. It was unveiled recently in Bandar Abbas.
- It is Iran's first submarine in the semi-heavy category.
- The underwater-vessel weighs nearly 600 tonnes and is equipped with torpedoes and naval mines in addition to cruise missiles.
- The submarine can operate more than 200 metres below sea level for up to 35 days.
- It has subsurface-to-surface missiles with a range of about 2,000 kilometres (1,250 miles), making it capable in reaching Israel and U.S. military bases in the region.

MAIDEN REGIONAL SAFETY CONFERENCE

Maiden 'Regional Maritime-Safety Conference' is being held in Mumbai. The Conference was organized by India for the first time.

Theme: '***Regional Maritime-Safety Conference'***.

- The objective of the conference is to deliberate on issues related to assuring maritime safety in the India-ASEAN sub region, safeguarding our shores and promoting trade along the sea routes. The conference will address a wide range of issues that affect regional maritime safety, including transport safety, maritime law, ship building, transportation of hazardous goods, marine oil spill, pollution and environmental safety.

- The inaugural edition is being organised by the National Maritime Foundation (NMF) in coordination with the Ministry of Shipping and the Ministry of External Affairs.

COMPANY UNDER DEPARTMENT OF SPACE

The Union Cabinet has given its approval to the Setting up of a new company under Department of Space (DoS), to commercially exploit the research and development work carried out by Indian Space Research Organization (ISRO) Centres and constituent units of DOS.

The following areas/avenues provide opportunities for commercial exploitation of ISRO programmes:

1. Small satellite technology transfer to industry, wherein the new company shall take license from DoS/ISRO and sub-license to industries.
2. Manufacture of small satellite launch vehicle (SLV) in collaboration with the Private Sector;
3. Production of Polar SLV through industry.
4. Production and marketing of Space-based products and services, including launch and applications.
5. Transfer of Technology developed by ISRO Centres and constituent units of DoS.
6. Marketing of some spin-off technologies and products, both in India and abroad.
7. Any other subject which Government of India deems fit.

MILITARY SPACE FORCE

USA has signed a directive- Space Policy Directive-4 (SPD-4)- to create a Military Space Force.

Accordingly, the Pentagon will establish the Space Force as the sixth branch of the United States military, to go along with the Army, Navy, Air Force, Marines and Coast Guard.

HIGHLIGHTS

- The main goal of the Space Force is to secure and extend American dominance of the space domain.
- The Space Force would initially reside within the Department of the Air Force, much as the Marine Corps is part of the U.S. Navy.
- Space Force will organize, train, and equip military space forces. Eventually, the aim is to push the Space Force out from under the Air Force's wings and make it a stand-alone organization.

START-UPS

The government has relaxed the norms under the definition of Start-Ups. The relaxations are in line with the government's vision to promote the culture of entrepreneurship and ease of doing business in India.

The new norms aim to catalyse entrepreneurship by enabling angel investments by innovators across all sections of society and all sectors of economy.

HIGHLIGHTS

- The investment limit of angel investors to seek exemption under the Income Tax Act, 1961 has been increased to Rs 25 crore from 10 Crore.
- An entity shall be considered a start-up up to 10 years from its date of incorporation/registration instead of the previous period of 7 years.
- An entity would be considered as a start-up up to a turnover of Rs 100 crore as against the earlier limit of Rs 25 crore.

LOFAR TELESCOPE

A new map of the night sky published recently charts hundreds of thousands of previously unknown galaxies discovered using LOFAR telescope that can detect light sources optical instruments cannot see.

HIGHLIGHTS

- The Low-Frequency Array or LOFAR, is a large radio telescope network located mainly in the Netherlands, completed in 2012 by ASTRON, the Netherlands Institute for Radio Astronomy and its international partners.
- LOFAR consists of a vast array of omnidirectional antennas using a new concept in which the signals from the separate antennas are not combined in real time as they are in most array antennas.
- The electronic signals from the antennas are digitized, transported to a central digital processor, and combined in software to emulate a conventional antenna.
- The project is based on an interferometric array of radio telescopes using about 20,000 small antennas concentrated in at least 48 stations.
- The mission of LOFAR is to map the Universe at radio frequencies from ~10–240 MHz with greater resolution and greater sensitivity than previous surveys, such as the 7C and 8C surveys, and surveys by the Very Large Array (VLA) and Giant Metre wave Radio Telescope (GMRT).

VIVID- 2019

VIVID-Vision Insight and Voices as India goes Digital"- the District Informatics Officer (DIO) meet, organised by National Informatics Centre (NIC).

HIGHLIGHTS

- The meet is held as an initiative to interact with the DIO's and to share their experiences as well as contribution, as digital change-makers at the grass-root level in the States.
- VIVID started in 2017, as an annual event, with the objective to empower NIC officials in the field of technology.
- The National meet will cover a wide range of relevant topics in various technical sessions including Emerging Technologies (Artificial Intelligence, Machine Learning & Big Data Analytics), Cyber Threats & Counter Measures (Changing Digitisation Paradigm & its impact on Security), Enterprise Level Applications, and many other relevant topics.

REGIONAL RAPID TRANSIT SYSTEM

The Union Cabinet approved construction of Delhi-Ghaziabad-Meerut Corridor of Regional Rapid Transit System (RRTS) covering a distance of 82.15 kms.

HIGHLIGHTS

- The RRTS is a first-of-its-kind, rail-based, high-speed regional transit system to be implemented in India
- Once operational, it will be the fastest, most comfortable and safest mode of commuter transport in the National Capital Region (NCR).
- The RRTS aims to streamline the urban transportation system, which is stressed due to intensive developments, and increase in the number of private vehicles.
- The project is meant to ensure 'Universal Access' by being sensitive to the needs of women, children and vulnerable sections of the society.

HIPPOCAMP

With help from NASA's Hubble Space Telescope, astronomers have confirmed the existence of Hippocamp- a tiny moon in orbit around Neptune.

HIGHLIGHTS

- With a diameter of only 20 miles, the newly characterized moon — named after a mythical half-horse, half-fish sea creature — is the smallest moon yet discovered in orbit around the outermost planet.
- The discovery of Hippocamp brings to 14 the number of moons discovered in orbit around Neptune.
- There are seven inner moons, including Hippocamp, along with six outer moons and Neptune's largest moon, Triton

GOLDEN RICE

- In 1999, a group of European scientists led by Dr Ingo Potrykus tried to change traditional rice by developing genetically-engineered rice that contains beta-carotene — by inserting bacteria and daffodil and maize genes into it. This is the golden rice, called so because of the golden colour of its grains.
- The golden rice was introduced in 2000 and argued to be the panacea for world's malnutrition problem.
- It was claimed that the rice is bio-fortified, and is supposedly high in Vitamin A, Iron and Zinc.
- It was considered as a significant breakthrough in biotechnology, with its first field trials conducted by the agriculture centre of Louisiana State University in 2004.
- Later, it has been claimed that field trials were conducted in the Philippines, Taiwan and Bangladesh.

GLOBAL HEALTH EXPENDITURE DATABASE

The World Health Organization (WHO) has released a new report on global health expenditure.

HIGHLIGHTS

- The Global Health Expenditure Database (GHED) provides internationally comparable data on health spending for close to 194 countries, since 2000.
- Health spending consists of government expenditure, out-of-pocket payments (people paying for their own care), and sources such as voluntary health insurance, employer-provided health programmes, as well as activities by non-profits.

REPORT

- According to the report, global spending on health has increased in low- and middle-income countries by 6% and in high income countries by 4%. However, worryingly, people are still paying too much out of their own pockets.
- In low- and middle-income countries, health spending is undergoing a transformation. The reliance of people on public funding has increased.
- In most regions, reliance on out-of-pocket spending is gradually going down and has also been associated with a reduction in the share of domestic government revenues allocated to health.
- While the total amount of aid that middle-income countries receive has increased, aid per capita, has fallen. In 2016, lower- and upper middle-income countries still received close to 57% of global aid, and certain middle-income countries still received large amounts of aid in absolute terms.

- Therefore, there is an inverse relationship between a country's income levels and the share of external aid as a health funding source.
- According to the report, the roles of external and domestic funding are evolving; however, external funding is declining in middle-income countries. Governments account for less than 40 per cent of primary health care spending.
- The data indicates that nearly half of donor funds for health and about 20% of public spending on health went to combat HIV/AIDS, malaria and tuberculosis.
- About one-third of domestic public spending went towards injuries and non-communicable diseases, which received comparatively little external funds.

PERMANENT RESIDENCE CERTIFICATE

Violence erupted in Arunachal Pradesh over the issue of Permanent Residence Certificate to six non-Arunachal Pradesh Scheduled Tribes (APSTs) living in the Namsai and Changlang districts and to the Gorkhas living in Vijaynagar.

Deoris, Sonowal, Kacharis, Morans, Adivasis and Mishings were demanding Permanent Residence Certificate. Most of these communities are recognised as Scheduled Tribes in neighbouring Assam. According to reports, the demand by these communities for PRC, recognising them as residents of the state, is long-standing, but is opposed by powerful groups.

PRC

- The State Government of Arunachal Pradesh issues the domicile certificate otherwise called as Permanent Residence Certificate (PRC) to the residents of the state who stayed therein over a period.
- Those citizens who are not currently residing in the state but are sure of permanently staying therein can also apply for it.
- Besides the permanent residence certificate, the State also offers Temporary Residence Certificate (TRC) for those who reside in the State on a temporary basis.

NATIONAL YOUTH PARLIAMENT FESTIVAL 2019

National Youth Parliament Festival 2019 was celebrated on 12th January, 2019, on the occasion of National Youth Day.

- National Youth Parliament Festival 2019 Theme: "Be The Voice of New India" and "Find solutions and contribute to policy".
- Youth in the age bracket of 18-25 years are invited to participate in the District Youth Parliaments.
- The National Youth Parliament Festival will encourage the youth to engage with public issues, understand the common man's point of view, form their opinion and express these in an articulate manner.
- Relevant and effective voices on the vision of New India would be captured and documented to make these available to policy makers and implementers to take it forward.
- National Youth Parliament Festival 2019 has been jointly organised by National Service Scheme (NSS) and Nehru Yuva Kendra Sangathan (NYKS) under the aegis of Ministry of Youth Affairs & Sports.

NATIONAL YOUTH DAY

The National Youth Day (also called as Yuva Diwas) is observed on January 12 every year to commemorate the birthday of Swami Vivekananda.

- The main objective is to propagate the philosophy and the ideals of Swami Vivekananda.
- It became a mainstream celebration in India from 1985 onwards and observed on January 12 ever since.

NATIONAL SERVICE SCHEME

- The National Service Scheme is an Indian government-sponsored public service program conducted by the Ministry of Youth Affairs and Sports of the Government of India.
- The scheme was launched in Gandhiji's Centenary year in 1969.
- The University Grants Commission (UGC) headed by Dr. Radhakrishnan recommended introduction of national service in the academic institutions on a voluntary basis with a view to developing healthy contacts between the students and teachers on the one hand and establishing a constructive linkage between the campus and the community on the other hand.

CHAGOS

The UK should end its control of the Chagos Islands in the Indian Ocean "as rapidly as possible", the UN's highest court has said. The International Court of Justice said the islands were not lawfully separated from the former colony of Mauritius.

UK: "This is an advisory opinion, not a judgment."

- The Chagos Archipelago is a group of seven atolls comprising more than 60 individual tropical islands in the Indian Ocean.
- It is officially part of the British Indian Ocean Territory.
- Chagos Archipelago has been part of Mauritius since at least the 18th century when France governed it.
- In 1810, Mauritius was captured by the United Kingdom and France ceded the territory in the Treaty of Paris.
- In 1965, three years before Mauritius got its independence, Britain separated the Chagos islands to carve out a 'British Indian Ocean Territory'.
- In 1966, the UK leased Diego Garcia (the biggest island in the Chagos archipelago) to the US to create an air & naval base. For constructing the defence installation, the inhabitants of the island were forcibly removed.
- In 1968 Mauritius was granted independence.
- In June 2017, the UN General Assembly adopted a resolution calling on the ICJ to deliver an advisory opinion on whether the continued administration of the Chagos Archipelago by the United Kingdom following the 1968 decolonisation process of Mauritius was lawful.

WFIRST TELESCOPE

WFIRST telescope will give humans the largest, deepest, clearest picture of the universe since the Hubble Space Telescope could find as many as 1,400 new planets outside Earth's solar system. The new telescope paves the way for a more accurate, more focused search for extra-terrestrial life, with about 100 of the not-yet-discovered planets having the same or lower mass as Earth.

WFIRST

- WFIRST, the Wide Field InfraRed Survey Telescope, is a NASA observatory designed to settle essential questions in the areas of dark energy, exoplanets, and infrared astrophysics.
- WFIRST will have two instruments, the Wide Field Instrument, and the Coronagraph Instrument.
- The Wide Field Instrument will have a field of view that is 100 times greater than the Hubble infrared instrument, capturing more of the sky with less observing time.

- As the primary instrument, the Wide Field Instrument will measure light from a billion galaxies over the course of the mission lifetime.
- WFIRST will use gravitational microlensing in its search for new planets.
- Gravitational microlensing is a technique that relies on the gravity of stars and planets to bend and magnify the light coming from stars that pass behind them from the telescope's viewpoint.

MARINE CLOUDS

A study by California Institute of Technology has found that Marine clouds that protect us from hothouse Earth conditions by reflecting sunlight back into space could break up and vanish if CO2 in the atmosphere triples. Computer modelling shows that marine stratus clouds could disappear if atmospheric CO2 levels climb high enough, raising global temperatures.

HIGHLIGHTS

- Stratocumulus clouds cover about 20% of subtropical oceans, mostly near western seabords such as the coasts of California, Mexico and Peru.
- When they disappear, Earth warms dramatically, by about eight degrees Celsius — in addition to the global warming that comes from enhanced greenhouse concentrations alone.
- A temperature increase of that magnitude would melt polar ice and lift sea levels tens of metres.
- The last time the planet was that hot, some 50 million years ago during the Eocene Epoch, crocodiles roamed the Arctic. Even half that much warming would overwhelm humanity's capacity to adapt.

STATOCUMULUS CLOUDS

- Stratocumulus clouds are low-level clumps or patches of cloud varying in colour from bright white to dark grey.
- They are the most common clouds on earth recognised by their well-defined bases with some parts often darker than others. They usually have gaps between them, but they can also be joined together.
- Stratocumulus clouds usually form from a layer of stratus cloud breaking up. They are indicators of a change in the weather and are usually present near a warm, cold or occluded front.
- Stratocumulus clouds can be present in all types of weather conditions, from dry settled weather to more rainy conditions, but they themselves are often not the culprit.
- Stratocumulus are often mistaken for rain clouds, when in reality it is quite rare to get anything more than the lightest drizzle from them, if anything at all.

MRINAL

Scientists of the Vikram Sarabhai Space Centre (VSSC) celebrated the 50th anniversary of the successful flight-test of 'Mrinal.

HIGHLIGHTS

- Mrinal was the Indian space programme's first composite solid propellant for launch vehicles.
- The propellant was launched from Thumba aboard an RH-75 sounding rocket on February 21, 1969 by members of the Propellant Engineering Division (PED) of the Vikram Sarabhai Space Centre (VSSC).
- It was named after Mrinalini Sarabhai (an Indian classical dancer and wife of the Indian physicist Vikram Sarabhai).

SHANTI SWARUP BHATNAGAR PRIZES FOR SCIENCE AND TECHNOLOGY

The Prime Minister Narendra Modi will confer the Shanti Swarup Bhatnagar Prizes for Science and Technology, at Vigyan Bhawan in New Delhi, on 28 February 2019 for 2016, 2017 and 2018 to the awardees.

HIGHLIGHTS

- Given by Council of Scientific & Industrial Research (CSIR).
- It is an annual award. The names of the recipients are traditionally declared by the Director General on every 26 September, which is the CSIR Foundation Day.
- The Prize is given each year to recognize outstanding Indian work in various disciplines of Science and Technology.
- The prize is divided into seven disciplines, namely: (1) Physical Sciences, (2) Chemical Sciences, (3) Biological Sciences, (4) Medical Sciences, (5) Mathematical Sciences, (6) Engineering Sciences and (7) Earth, Atmosphere, Ocean and Planetary Science.
- Further, each discipline can have multiple winners (maximum 2 individuals).

CRITERIA

- Any citizen of India engaged in research in any field of science and technology up to the age of 45 years is eligible for the prize.
- The prize is awarded on the basis of contributions made through work done in India only during the five years preceding the year of the prize.
- Prize money: ₹5 lakh.
- It was first awarded in 1958.

SHANTI SWARUP BHATNAGAR

- The award is named after Shanti Swarup Bhatnagar (1894 – 1955).
- He was a professor of chemistry.
- He was the first director-general of the Council of Scientific and Industrial Research (CSIR), thus he is revered as the "father of research laboratories".
- He was also the first Chairman of the University Grants Commission (UGC).
- In 1954 he was awarded Padma Bhushan.

EXTERNAL BENCHMARK FOR LOAN PRICING

From April 1, most commercial banks in India are likely to select RBI's repo rate as the external benchmark to decide their lending rates as the repo rate is the most stable one as compared to the other options.

HIGHLIGHTS

- The marginal cost of fund based lending rate (MCLR) is currently the benchmark for all loan rates. Banks typically add a spread to the MCLR while pricing loans for homes and automobiles.
- The Reserve Bank of India (RBI) had asked the banks to move to an external benchmark for loan pricing from April 1.
- For the new benchmark, the spread over the benchmark rate — to be decided by banks at the inception of the loan — should remain unchanged through the life of the loan, unless the borrower's credit assessment undergoes a substantial change and as agreed upon in the loan contract.
- RBI is expected to issue the final guidelines on the matter in March.
- Banks had four options from which to choose the external benchmark -

1. The Repo Rate.
2. The 91-day treasury bill.
3. The 182-day T-bill.
4. Any other benchmark interest rate produced by the Financial Benchmarks India Private Ltd (FBIL).

Financial Benchmark India Private Ltd (FBIL)

- Financial benchmarking is estimating and producing standard market rates for leading financial indicator like interest rate, foreign exchange rate, pricing of government securities etc.
- Financial Benchmark India Private Ltd (FBIL) was jointly promoted by Fixed Income Money Market & Derivative Association of India (FIMMDA), Foreign Exchange Dealers' Association of India (FEDAI) and Indian Banks' Association (IBA).
- It was incorporated in 2014 under the Companies Act 2013. It was recognised by Reserve bank of India as an independent Benchmark administrator in 2015.
- The main objective of the company is to act as the administrators of the Indian interest rate and foreign exchange benchmarks and to introduce and implement policies and procedures to handle the benchmarks.

CHHIPA COMMUNITY

Union Textiles Minister inaugurated the 'Titanwala Museum' in Bagru that showcases the Chhipa community's hand-block printing.

HIGHLIGHTS

- Bagru is a town situated 30km away from the city of Jaipur.
- Bagru is well known for its handblock printing using natural dyes & techniques.
- This technique of hand block printing is believed to be started by the God of Chhipa community "Sant Siromani Shri Namdevji Maharaj".
- The Chhipa's are referred to the caste of the block printers. The traditional fabric printing and dyeing arts of Rajasthan like Bandhej, Bagru, leheriya, etc. still remain synonymous with the community.
- This tradition of printing is as old as 350 years.
- Traditional hand prints include the Dabu resist, farad printing, and the commonly used Bagru print, which is characterized by the use of harda, a mordant, Shahi and beger, natural paints, boiling to fix the dyes, and of course drying in the sun to insure fixed colors.
- Hand block printing is a centuries old Indian art form that utilizes a hand carved teak wood block that is dipped in dye and stamped by hand onto cotton or silk.
- The design for the block is usually a traditional Indian motif. The motif is traced onto a block by a master craftsman who then chips away at the block to create a stamp.

HYPER SPECTRAL IMAGERY PROGRAMME

The Indian Air Force (IAF) has commissioned hyper spectral imagery programme, a first for the country to locate and identify suspicious movements and is expected to be operational in the next two years.

HIGHLIGHTS

- This aerial surveillance system is being developed primarily for monitoring suspicious movements in areas with dense tree cover along the border.
- The technology can also be deployed in agriculture for monitoring drought, disease and nutrient stress or identifying soil moisture.

- It will track unwanted human presence, their numbers and locations with optical and infrared sensors. It can detect human presence from air even if there a cloud cover, dense fog or snow cover.
- The data will be analysed with deep learning algorithms and immediately relayed to security forces.
- IAF has roped in former NASA scientist Kumar Krishen as the chief technologist.
- Cost: 13 crore.
- Time frame: Within 2 years.
- 'Hyspectral' imaging (Hyperspex) is said to enable distinct identification of objects, materials or processes on Earth by reading the spectrum for each pixel of a scene from space.

DRAFT E-COMMERCE POLICY

Draft E-Commerce Policy aiming at Data Protection has been introduced by the Government of India.

HIGHLIGHTS

The draft policy comes after the government updated the FDI policy for online marketplaces in December which puts curbs on how large foreign e-tailers operate in India.

Objective: To strengthen consumer rights with regards to counterfeit products and the overall grievance mechanism, apart from putting in measures to stem the flow of goods through illegal means into the country.

- It puts restrictions on how foreign online retailers, including fast-growing Chinese e-commerce firms, operate in India.
- Restricting cross border flow of data and leveraging it to help start-ups are also some of the other key measures proposed.
- All e-commerce websites and applications available for downloading in India must have a registered business entity in India as the importer on record or the entity through which all sales in India are transacted.
- Consumer/business payments from Indian banks and payment gateways to unauthorised and unregistered (GST non-compliant) sites/apps shall be barred.
- If the seller fails to prove the authenticity of the product, the marketplace would have to take it down and remove all information of the same.
- All e-commerce sites/apps available to Indian consumers (displaying prices in rupees) must have MRP on all packaged products, physical products and invoices.

DONGRIA KONDH

With a recent Supreme Court order triggering panic among forest dwellers over possible eviction, Odisha's Dongria Kondh tribals have resolved to resist any attempt to force them out. The Dongria Kondh are currently holding their annual 'Niyamraja Parab/ festival'.

HIGHLIGHTS

- Dongria Kondh people are members of the Kondhs, of the Munda ethnic group.
- They are located in the Niyamgiri hills. Niyamgiri is a hill range spread over 250 sq.km which falls under the Rayagada and Kalahandi District in Odisha.
- They worship Niyam Raja (Niyamraja), the supreme god of the Niyamgiri jungle.
- The Dongria Kondh community numbers approximately 8,000 people, inhabiting about 100 villages.

- They derive their name from dongar, meaning 'hill' and the name for themselves is Jharnia: protector of streams.
- The people of Niyamgiri use Kui language. Kui language is not written, but it is spoken among the people of Kondh community.
- The Dongria have distinctive jewellery, tattoos and hairstyles. Women wear many rings through their ears and three through their noses, while boys wear two nose rings. Dongria girls wear clips in their hair and rings and beads around their necks.
- They sustain themselves from the resources of the Niyamgiri forests, practising horticulture and shifting cultivation.
- They have been at the centre of a dispute over mining rights in the area.
- Vedanta Resources planned to extract the estimated \$2billion-worth of bauxite that lies under the surface of the hills.
- The company planned to create an open-cast mine that would have violated Niyam Dongar, disrupted its rivers and spelt the end of the Dongria Kondh as a distinct people.

Niyamraja Parab

- Niyamraja, the deity of Jharania and Donria Kondh tribal communities, is worshipped grandly during this time every year during the three-day festival Niyamraja Parab.
- As per tribal traditions, the sacred pillar is established at Anlabhata on the Niyamgiri Hilltop, and is seen as a great tradition of nature worship.
- After worshipping Niyamraja, they hold blood soaked rice in their fists and vow before their deity to protect nature forever.

ORGANISATION OF ISLAMIC COOPERATION (OIC)

External Affairs Minister Sushma Swaraj has been invited to deliver an address at the 46th Session of Organisation of Islamic Cooperation (OIC) in Abu Dhabi next month. This is the first time that a leader of non-Muslim country has been invited to the OIC conference.

HIGHLIGHTS

- It is an international organization with the primary objective of safeguarding the interests of the Muslim world in the spirit of promoting international peace and harmony.
- It was established in 1969 after attack on Al-Aqsa Mosque in Jerusalem.
- It is the second largest inter-governmental organization after the United Nations with a membership of 57 states. Of these, 47 are Muslim Majority countries.
- Observer countries: Bosnia and Herzegovina; Central African Republic; Thailand; Russia and Turkish Cypriot State.
- Headquarters (HQ): Jeddah, Saudi Arabia.

BIO-ATF

Dehradun-based Indian Institute of Petroleum has successfully finished a pilot test to convert used cooking oil into bio-aviation turbine fuel (Bio-ATF), which can be blended with conventional ATF and used as aircraft fuel.

HIGHLIGHTS

- The chemical composition of the used cooking oil is identical to other plant-based oils that have been converted to Bio-ATF. The pilot test has proven that it is very similar to Bio-ATF derived from jatropha oil.

- The Institute collected used cooking oil from caterers and hotels in Dehradun for the pilot, which has now set the platform for commercial use of the technology. The Bio-ATF derived from used cooking oil is yet to be tested on a flight.
- Reducing the re-use of cooking oil in the food industry will have positive public health outcomes and its conversion into Bio-ATF will help the aviation sector reduce its carbon footprint.
- The Indian Air Force (IAF) and the civil aviation sector consume about 100 crore litres and 900 crore litres of ATF per annum, suggesting a huge potential market for Bio-ATF.

Repurpose Cooking Oil (RUCO) initiative:

The test assumes importance as the Food Safety and Standards Authority of India (FSSAI) has launched the Repurpose Cooking Oil (RUCO) initiative to collect and convert used cooking oil into bio-fuel.

As many as 64 companies in 101 locations across the country have been identified for the purpose by FSSAI. By 2020, it should be possible to recover about 220 crore litres of used cooking oil for conversion into bio-fuel.

CSIR-IIP

CSIR-Indian Institute of Petroleum (CSIR-IIP) is a laboratory of the Council of Scientific & Industrial Research (CSIR) based in Dehradun, Uttarakhand.

It was established in 1960, for undertaking R&D work in the downstream sector of hydrocarbon (areas of petroleum refining, natural gas, alternative fuels, petrochemicals utilization of petroleum products etc).

ATTUKAL PONGALA

In Kerala, the capital city of Thiruvananthapuram is all prepared to host the Attukal Pongala festival which is considered as one of the world's largest religious gathering of women on a single day.

HIGHLIGHTS

- The Attukal Pongala held in Attukal Temple, Thiruvananthapuram.
- Pongala, which means 'to boil over', is the ritual in which women prepare sweet payasam (a pudding made from rice, jaggery, coconut and plantains cooked together) and offer it to the Goddess or 'Bhagavathy'.
- Attukal temple is also called 'women's Sabarimala' as only women perform the ritual.
- The Goddess-fondly referred to as 'Attukamma' is said to be appeased by this ritual.
- The festival that has figured in the Guinness Book of World Records for being the single largest gathering of women for a religious activity.
- The Attukal Bhagavathy Temple is a Hindu religious shrine at Attukal, Thiruvananthapuram in Kerala.
- Goddess Bhadrakali, mounted over 'vethala', is the main deity in this temple. Bhadrakali, a form of Mahakali, who killed the demon king Daruka, believed to be born from the third eye of lord Shiva.
- The temple is renowned for the annual Attukal Pongala festival.

MUGA SILK

- Muga silk is a variety of wild silk geographically tagged to the state of Assam in India.
- The silk is known for its extreme durability and has a natural yellowish-golden tint with a shimmering, glossy texture.

- Muga silk is the product of the silkworm *Antheraea assamensis*.
- Muga silk was recognized as a protected geographical indication (GI) in 2007, and was granted a GI logo for trademark purposes in 2014.
- The logo has been registered with the Assam Science Technology and Environment Council.

BANDICOOT

In Chennai, a drainage-cleaning robot named Bandicoot has been introduced for the first time at the city corporation as part of efforts to rid of manual scavenging.

HIGHLIGHTS

- According to officials, the robot named Bandicoot has been introduced at a cost of 18 lakh rupees. Tamil Nadu Minister Kadambur Raju inaugurated the operation of the robot which would end deaths of workers engaged in sewer cleaning.
- Bandicoot, with its motto 'changing manhole to robohole', is a human controlled robot. It's the brainchild of Genrobotics, a Thiruvananthapuram-based start-up which was founded in 2015.
- As opposed to the sewer suction machines that only suck the liquid waste from the sewer, Bandicoot has the ability to reach deep down the drainage and remove the solid waste, hence unblocking the sewage.
- It has a shovel and a jet pipe attached to it which makes it better equipped to clean the sewage, along with a camera that can aid in inspecting the manhole for any blockages.
- Bandicoot can finish the work of five people in lesser time with better efficiency and is available in both automatic and semi-automatic modes.

INDICLEFT TOOL

The Indian Council of Medical Research (ICMR) has launched the Indicleft tool, a national web-based portal on cleft education and researcher's platform.

HIGHLIGHTS

- The Indicleft tool is the first-of-its-kind portal that provides facility to researchers' data and findings to upload cleft anomaly from any site.
- Project is to establish strategies for prevention and treatment of this deformity
- The tool includes all aspects of the cleft anomaly from the time of conception, birth and till adulthood.
- The tool has been developed in collaboration with National Informatics Centre (NIC), under the aegis of a task force multi-speciality project funded by the ICMR in collaboration with the Centre for Dental Education and Research, AIIMS, New Delhi.
- A cleft lip contains an opening in the upper lip that may extend into the nose.
- A cleft palate is when the roof of the mouth contains an opening into the nose. The conditions of Cleft lip and cleft palate are together known as orofacial cleft.

THANE CREEK FLAMINGO SANCTUARY (TCFS)

An environment clearance by a committee, chaired by Union Environment Minister to the Bullet train (Mumbai-Ahmedabad high-speed train corridor) has put the spotlight on the Thane Creek Flamingo Sanctuary (TCFS) in Mumbai.

HIGHLIGHTS

- The Thane Creek Flamingo Sanctuary (TCFS) is on the western bank of the creek, between the Airoli and the Vashi bridges connecting Mumbai and Navi Mumbai.
- It consists of 896 hectares of mangrove forests and 794 hectares of waterbodies.

- It came into being in 2015 and is Maharashtra's second marine sanctuary, after Malvan.
- The TCFS has been attracting flamingos in large numbers since 1994. By November every year, over 30,000 flamingos occupy the mudflats and the bordering mangroves. They stay till May, after which most of them migrate to Bhuj in Gujarat for breeding.
- Besides supporting a large congregation of flamingos, the area is a refuge for many resident and migratory birds. In all, 200 species have been reported here, even globally threatened species such as the greater spotted eagle and others such as osprey.

KALA GHODA ARTS FESTIVAL (KGAF)

The Kala Ghoda Arts Festival (KGAF), India's largest multi-cultural street festival began in Mumbai. The festival will end on 10th February.

HIGHLIGHTS

- The Kala Ghoda Arts Festival (KGAF) is India's largest multi-cultural street festival in order to bring attention to the South Mumbai's art and architectural heritage.
- It is held annually since 1999 in February (the first Saturday till the next Sunday, for nine days).
- Organized by Kala Ghoda Association, which was formed in 1998 with the object of maintaining and preserving the heritage and art district of South Mumbai.

KGAF 2019: Commemorating 20 years of its inception, KGAF 2019 will celebrate two decades of art and culture through cinema, theatre, dance, literature etc. at various places in Mumbai.

KIRU HYDROPOWER PROJECT

Prime Minister will lay foundation stones of two new All India Institute of Medical Sciences and 624 MW Kiru Hydroelectric project in Kishtwar, Jammu and Kashmir.

HIGHLIGHTS

- Kiru Hydroelectric Project is a run of the river scheme planned on river Chenab, a tributary of the Indus, in Kishtwar, Jammu & Kashmir.
- The projects would be developed by the Chenab Valley Power Projects (CVPP)--a joint venture among National Hydroelectric Power Corporation (NHPC), state power body JKSPDC and Power Trading Corporation.
- Beneficiary States: J&K, Himachal Pradesh, Punjab, Haryana, Uttar Pradesh, Uttaranchal, Rajasthan, Union territories of Chandigarh & Delhi.
- Dam Type: Concrete gravity.
- A run-of-the-river project is a type of hydroelectric plant, where a river's water is not held back in a reservoir, but flows back into the river after generating electricity.

DENOTIFIED TRIBES (DNT)

During the interim budget 2019-20, Government of India announced that it will set-up a Committee under Niti Aayog to complete task of identifying De-Notified, Nomadic and Semi-Nomadic Communities not yet formally classified.

HIGHLIGHTS

- Denotified tribes (DT): Tribes labelled as criminals through a legislation by British government and were denotified post-independence.
- Nomadic tribes (NT): Tribes maintaining constant geographical mobility.
- Semi-Nomadic Tribes (SNT): Tribes who are on the move, but return to fixed habitations once a year, mainly for occupational reasons.

BACKGROUND

- The term, 'De-notified and Nomadic Tribes', can be traced to the Criminal Tribes Act (CTA) of 1871.
- The colonial government notified nearly 200 tribal communities to be hereditary criminals and subjecting them to constant harassment by the administration.
- After India gained Independence, these tribes were 'de-notified' from the list of Criminal Tribes, and, hence, the term.
- The CTA was repealed and the Habitual Offenders Act (HOA) was enacted in various States. Currently, a variant of the HOA Model Bill as proposed by the Union Government stands enforced in 10 States across the country, having been enacted in many more.

GOVERNMENT INITIATIVES

- To address these issues, the first National Commission for Denotified, Nomadic and Semi-nomadic Tribes (NCDNT) was constituted in 2003.
- NCDNT was reconstituted two years later under the chairpersonship of Balkrishna Renke, which submitted its report in 2008.
- The **Renke Commission** estimated their population between 10-12 crore.
- In 2015, **Idate Commission** was constituted under the chairmanship of Bhiku Ramji Idate which submitted its report in January 2018. Its Key Recommendations are –
- Set up a Permanent Commission for them on the lines of similar commissions for Scheduled Castes, Scheduled Tribes, and Other Backward Classes.
- Set up a dedicated National Finance Development Corporation for them.
- Set up a working group under NITI Aayog to look into various policy issues relating to the communities.
- Grant Constitutional protection to these communities, under a separate third schedule after Scheduled Castes and Scheduled Tribes. Making them eligible for reservation, and extending the protective cover of Prevention of Atrocities Act to them.
- A Committee under NITI Aayog will be set-up to complete the task of identifying De-notified, Nomadic and Semi-Nomadic communities not yet formally classified.
- A Welfare Development Board under the Ministry of Social Justice and Empowerment will be set-up for implementing welfare and development programmes for them.

INDIAN SUNDARBAN WETLANDS

The Indian Sundarbans has been accorded the status of 'Wetland of International Importance' under the Ramsar Convention. The part of the Sundarbans delta, which lies in Bangladesh, was accorded the status of a Ramsar site in 1992.

HIGHLIGHTS

- The Sundarbans comprises hundreds of islands and a network of rivers, tributaries and creeks in the delta of the Ganga and the Brahmaputra at the mouth of the Bay of Bengal in India and Bangladesh.
- The Indian Sundarbans constitutes over 60% of the country's total mangrove forest area.
- It is the 27th Ramsar Site in India, and with an area of 4,23,000 hectares is now the largest protected wetland in the country.

Criteria's met for Ramsar recognition:

- It met 4 of the 9 criteria required for the status of 'Wetland of International Importance' — presence of rare species and threatened ecological communities, biological diversity, significant and representative fish and fish spawning ground and migration path.

- The Indian Sundarbans, also a UNESCO world heritage site, is home to the Royal Bengal Tiger.
- It is also home to rare and globally threatened species, such as the critically endangered northern river terrapin (*Batagur baska*), the endangered Irrawaddy dolphin (*Orcaella brevirostris*), and the vulnerable fishing cat (*Prionailurus viverrinus*).
- Two of the world's four horseshoe crab species, and 8 of India's 12 species of kingfisher are also found here.
- It is also home to 2,626 faunal species and 90% of the country's mangrove varieties.

FACTS

- Nilavembu Kudineer, also called Nilavembu Kashayam, is being distributed to the people in Tamil Nadu to combat dengue and chikungunya. Nilavembu is a small plant and is widely known as the king of bitter herbs. It is a natural antipyretic, anti-inflammatory, analgesic herb, which is used for the treatment of all types of fever associated with body ache. Its scientific name is *Andrographis paniculate*.
- 'Waste to Wonder Park', built by the South Delhi Municipal Corporation (SDMC) was recently inaugurated. It is the first-of-its-kind tourist attraction in the world, with the replicas of the Taj Mahal, the Great Pyramid of Giza, Eiffel Tower, Leaning Tower of Pisa, Christ the Redeemer statue of Rio de Janeiro, Rome's Colosseum, and the Statute of Liberty. The replicas of all seven wonders of world has been built with eco-friendly, self-sustainable material, and has its own solar and wind power generation.
- RBI announced that FPIs will now be allowed to invest more than 20 % of its corporate bond portfolio in a single corporate. Earlier, there was a cap of 20 per cent on investment in single corporate to encourage FPIs to maintain a wider portfolio of assets. The cap has been removed to encourage more foreign investments and order to encourage a wider spectrum of investors to access the Indian corporate debt market.
- Israeli spacecraft Beresheet (lunar lander) has been launched into space by SpaceX. o Israel seeks to become only the fourth country to successfully land on the moon, after Russia, the US and China. The spacecraft — called Beresheet, Hebrew for Genesis or "In The Beginning" — will take nearly two months to reach the moon. o Beresheet will measure the magnetic field at the landing site, and send back data and pictures.
- Macedonia has signed an accord to join NATO to become the 30th member of the US-led alliance. The admittance of a new member highlighted that all European nations who meet the entrance criteria could join the regional alliance. However, Moscow has continually rejected NATO's position, saying that by taking in Balkan members, the alliance is undermining security in the region.
- Iran has successfully tested its new Hoveizeh long-range cruise missile. The Hoveizeh, part of the Soumar family of cruise missiles unveiled in 2015, has a range of over 1,350 km (840 miles) and is designed to be used against ground targets. Iran has voluntarily limited the range of its missiles to 2,000 km (1,250 miles), sufficient to reach Israel and Western bases in the Middle East.
- The Union Ministry of Environment, Forests and Climate Change has signed a Letter of Intent (LoI) with the Norwegian Ministry of Foreign Affairs to launch the 'India-Norway Marine Pollution Initiative'. The India-Norway Marine Pollution Initiative will combat marine pollution, which is one of the fastest growing environmental concerns.

- Pahari Dam modernization project was recently inaugurated by the PM. Pahari Dam is a water storage dam situated on Dhasan River in Jhansi district. The Dhasan River is a right bank tributary of the Betwa River. The river originates in Madhya Pradesh. The project will benefit farmers by reducing the water leakage from the dam and make more water available for the farmers.
- Argentina is the 72nd country to sign the Framework Agreement of the International Solar Alliance.
- Sikaria Mega Food Park is the 1st Mega Food Park of Tripura. It was inaugurated recently.
- 14th Agricultural Science Congress is being held at New Delhi. Organized by "The NAAS in collaboration with the ICAR and Indian Agricultural Research Institute". Theme: "Innovations for Agricultural Transformation".
- Velayat 97: It is a navy drill being conducted by Iran. It aims to evaluate the navy's equipment, practice launching weapons and enable the troops to gain readiness for a real battle.
- The government of Gujarat has launched the second edition of the water conservation scheme Sujalam Sufalam Jal Sanchay Abhiyan. The scheme aims to deepen water bodies in the state before monsoon to increase storage of rainwater to be used during times of scarcity. It involves cleaning and desilting of riverfronts, sprucing up of Irrigation canals.
- '2nd Edition of ISL Dictionary' for Hearing Impaired Persons has been launched. The Dictionary Includes 6000 Words Under Categories of Academic, Legal, Medical, Technical & Everyday Terms. The dictionary has been developed by Indian Sign Language Research & Training Centre (ISLR&TC) under Department of Empowerment of Persons with Disabilities (DEPwD), M/o Social Justice & Empowerment. Its aim is to give Deaf people the constitutional right to speech and opportunity of freedom of expression and also bringing them into the main stream of the society.
- "South Coast Railway (SCoR)" - a new Zone of Indian Railways: Creation of a new zone with headquarter at Visakhapatnam. The new zone named "South Coast Railway (SCoR)", will comprise of existing Guntakal, Guntur and Vijayawada divisions. South Central Railway will comprise of Hyderabad, Secunderabad and Nanded divisions.
- India's first Indigenous Semiconductor Chips by Bengaluru based semiconductor company "SIGNALCHIP" for 4G/LTE and 5G NR MODEMS was recently unveiled. With this, India has entered into the elite club of the world and this will have huge implications for India's data security and data sovereignty, besides the positive economic implications. At present only 8 companies and a few countries can design and build semiconductor chips.
- ANOOP SATPATHY COMMITTEE: Expert Committee under the Chairmanship of Dr. Anoop Satpathy submitted its Report on Determining Methodology for Fixing National Minimum Wage.
- **DIGIDHAN MITRA CHATBOT: *Designed and developed by NIC, the AI based Digidhan Mitra enables a text & voice-based conversation with the user, mining the Digidhan Portal, to give customized information in graphical, tabular and textual format.*** It provides bank wise transactions details as well as growth pattern of various modes of transactions like BHIM, IMPS, Cards etc. in tabular as well as graphical form.