RAJ MALHOTRA'S IAS ACADEMY, CHANDIGARH

POLITY/GOVERNANCE

Mission Karmyogi

The Union Cabinet has approved launching of a **National Programme for Civil Services Capacity Building (NPCSCB)** with the following institutional framework -
- Prime Minister's **Public Human Resources (HR) Council**,
- **Capacity Building Commission**
- **Special Purpose Vehicle** for owning and operating the digital assets and the technological platform for online training,
- **Coordination Unit** headed by the **Cabinet Secretary**.

Salient features -
- NPCSCB has been carefully designed to lay the foundations for capacity building for Civil Servants so that **they remain entrenched in Indian Culture and sensibilities and remain connected, with their roots**, while they learn from the best institutions and practices across the world.
- The Programme will be delivered by setting up an **Integrated Government Online Training - iGOT Karmayogi Platform**. The core guiding principles of the Programme will be -
  - Supporting Transition from '**Rules based**' to '**Roles based' HR Management**. Aligning work allocation of civil servants by matching their competencies to the requirements of the post.
  - To emphasise on '**on-site learning**' to complement the '**off-site**' learning,
  - To create an ecosystem of **shared training infrastructure** including that of learning materials, institutions and personnel,
  - To **calibrate all Civil Service positions** to a Framework of Roles, Activities and Competencies (FRACs) approach and to **create and deliver learning content** relevant to the identified FRACs in every Government entity,
  - To make available to all civil servants, an opportunity to **continuously build and strengthen their Behavioural, Functional and Domain Competencies** in their self-driven and mandated learning paths.
  - To **enable all the Central Ministries and Departments** and their Organisations to **directly invest their resources** towards co-creation and sharing the **collaborative** and **common ecosystem of learning** through an annual financial subscription for every employee,
  - To encourage and partner with the **best-in-class learning content creators** including public training institutions, universities, start-tips and individual experts,
  - To **undertake data analytics** in respect of data emit provided by iGOT- Karmayogi pertaining to various aspects of **capacity building, content creation, user feedback and mapping of competencies** and identify areas for policy reforms.

Objectives -
- It is also proposed to set up a **Capacity Building Commission**, with a view to ensure a uniform approach in managing and regulating the capacity building ecosystem on collaborative and co-sharing basis.
- The role of Commission will be as under-
  - To **assist the PM Public Human Resources Council** in approving the Annual Capacity Building Plans.
  - To exercise **functional supervision over all Central Training Institutions** dealing with civil services capacity building.
  - To create **shared learning resources**, including internal and external faculty and resource centres.
  - To **coordinate and supervise the implementation of the Capacity Building Plans** with the stakeholder Departments.
  - To **make recommendations on standardisation of training** and capacity building, pedagogy and methodology
  - To **set norms for common mid-career training programs** across all civil services.

- To **suggest policy interventions** required in the areas of **HR Management and Capacity Building** to the Government.

About iGOT-Karmayogi Platform -
- **iGOT-Karmayogi platform** brings the scale and state-of-the-art infrastructure to augment the capacities of over two crore officials in India.
- The platform is expected to evolve into **a vibrant and world-class market place for content** where carefully curated and vetted digital e-learning material will be made available.
- Besides capacity building, **service matters** like confirmation after probation period, deployment, work assignment and notification of vacancies etc. would eventually **be integrated with the proposed competency framework**.

About Public Human Resources Council -
A Public Human Resources Council comprising of **select Union Ministers, Chief Ministers, eminent public HR practitioners, thinkers, global thought leaders** and Public Service functionaries under the **Chairmanship of Hon'ble Prime Minister** will serve as the apex body for providing **strategic direction to the task of Civil Services Reform and capacity building**.

Climate Smart Cities Assessment Framework (CSCAF 2.0)

Union Ministry of Housing and Urban Affairs has launched the **Climate Smart Cities Assessment Framework (CSCAF) 2.0**, along with the 'Streets for People Challenge'.

What is CSCAF?
- The objective of CSCAF is to **provide a clear roadmap for cities** towards **combating Climate Change** while planning and implementing their actions, including investments.
- In the last decade, **an increasing frequency of cyclones, floods, heat waves, water scarcity and drought-like conditions** have had adverse impacts on many of our cities.
- Such extreme events and risks cause loss of life as well as impact the economic growth. In this context, **CSCAF initiative intends to inculcate a climate-sensitive approach to urban planning and development in India**.
- The framework has 28 indicators across five categories namely; (i) Energy and Green Buildings, (ii) Urban Planning, Green Cover & Biodiversity, (iii) Mobility and Air Quality, (iv) Water Management and (v) Waste Management.
- The **Climate Centre for Cities under National Institute of Urban Affairs (NIUA)** is supporting MoHUA in **implementation of CSCAF**.

Streets for People Challenge -
- The Streets for People Challenge is the **response to the need for making our cities more walkable and pedestrian friendly.**
- The Challenge will support cities across the country to **develop a unified vision of streets for people in consultation with stakeholders and citizens**.
- Adopting a participatory approach, cities will be guided to launch their own design competitions to gather innovative ideas from professionals for quick, innovative, and low-cost tactical solutions.
- It aims to **inspire cities to create walking-friendly and vibrant streets** through quick, innovative, and low-cost measures. All cities participating in the challenge shall be encouraged to use the '***test-learn-scale***' approach to initiate both, flagship and neighbourhood walking interventions.
- The interventions can include inter alia **creating pedestrian-friendly streets** in high footfall areas, **re-imagining under-flyover spaces**, **revitalising dead neighbourhood spaces**, and **creating walking links** through parks and institutional areas.

National Medical Commission

The National Medical Commission Bill envisaged the creation of a National Medical Commission (NMC) to replace the erstwhile Medical Council of India. In line with this objective, the National Medical Commission (NMC) has been constituted along with four Autonomous Boards.

Details -
- This new body would be **responsible for the medical accreditation** of all medical education institutions within the country as well as **maintaining a national registrar of all certified allopathic medical practitioners** within the country.
- Along with NMC, **the four Autonomous Boards** of **UG and PG Medical Education Boards, Medical Assessment and Rating Board, and Ethics and Medical Registration Board** have also been constituted to help the NMC in day to day functioning.
- With the coming into effect of the NMC Act, **the Indian Medical Council Act, 1956 stands repealed** and the Board of Governors appointed in supersession of Medical Council of India has also been dissolved.

Key functions of NMC -
- The key functions of the NMC will be further **streamlining regulations, rating of institutions, HR assessment, focus on research**.
- Besides they will work on modalities of the common final year exam after MBBS (NEXT-National Exit Test) to serve for both registration and PG entrance; prepare guidelines for fee regulation by private medical colleges; and developing standards for Community Health Providers to serve in primary healthcare with limited practicing licence.
- It may be recalled that the **National Medical Commission Act, 2019** was passed by the Parliament in August, 2019.

Background of MCI -
- The Medical Council of India (MCI) was established in 1934 under the Indian Medical Council (IMC) Act of 1933.
- At the time, its primary function was to **standardise both training in medicine and the accreditation of medical and surgical proficiency**.
- In 1956, the original IMC Act was repealed and redesigned. It has subsequently received face-lifts with amendments enacted in 1964, 1993, and 2001.
- The Council was composed of **one representative from each State** (appointed by the Central Government), **one medical faculty member from each University** (appointed by the Senate of the public University), **one representative of each State which maintains a Medical Register** (elected by members on the register), **seven members enrolled on any of the State Medical Registers** (elected from amongst themselves) and **eight Central Government representatives** (appointed by the Central Government).
- The MCI elected its President and Vice-President.

Way forward -
After looking at various other countries and their accreditation systems,, five changes can be recommended -
- **Removing NMC members** from the Medical Advisory Council,
- Creating **regional medical councils** in the place of third party organisations,
- **Adopting WHO guidelines** as the basis of all standards set by the Under-Graduate Medical Education Board and the Post-Graduate Medical Education Board,
- Ensuring that post-graduate schools receive **accreditation only if they have a research based meritocracy** for students and staff, and
- Mandating that all medical school graduates **work in the country** for a limited amount of time.

Tele-Law Service

To commemorate the journey of it's Tele-Law programme, union Department of Justice has released its first booklet "Tele-Law - Reaching the Unreached, "Voices of the beneficiaries".

What is 'Tele-Law' service?

- It is a program by the government where **people can seek legal advice from lawyers through video conferencing** available at the Common Service Centers, on the 'Tele Law' portal – a technology-enabled platform.
- Tele-Law programme was **launched in 2017** to address **cases at pre–litigation stage**.
- Especially designed **to facilitate early detection, intervention and prevention** of the legal problems, the Tele-Law service is proactively outreached to groups and communities through a cadre of frontline volunteers provided by NALSA and CSC- e Gov.
- These grassroots soldiers have been additionally **equipped with a mobile application to pre-register and schedule appointment of the applicants** during their field activity. Dedicated pool of lawyers has been empanelled to provide continued legal advice and consultation to the beneficiaries.
- Under this programme, **smart technology of video conferencing, telephone /instant calling facilities** available at the vast network of Common Service Centres at the Panchayat level are used to connect the indigent, down-trodden, vulnerable, unreached groups and communities with the Panel Lawyers for seeking timely and valuable legal advice.
- A panel of lawyers will be provided by the **National Legal Services Authority (NALSA)** in every state capital to advise the applicants through video conferencing.
- The first phase will be implemented across 1800 panchayats in **Jammu and Kashmir, North Eastern States, Uttar Pradesh and Bihar**.

CCRGA

Recently, the 19th meeting of Supreme Court mandated Committee on Content Regulation in Government Advertising (CCRGA) was held.

What is CCRGA?
- As per the directions of the Supreme Court on 13th May, 2015, the Government of India on 6th April, 2016 had set up **a three member body** consisting of "persons with unimpeachable neutrality and impartiality and who have excelled in their respective fields", **to look into content regulation of government funded advertisements of all media platforms**.
- As per directions of the Supreme Court, **states are mandated to set up their respective three member committees** on Content Regulation of Government Advertisements. **Karnataka, Goa, Mizoram and Nagaland** States have already constituted state-level Three Member Committees. The State Government of **Chhattisgarh** has given its consent to the Central Committee to monitor the content of their government advertisements.

Guidelines -
- Under the Supreme Court's guidelines" –*the content of Government Advertisement should be relevant to the government's constitutional and legal obligations as well as the citizen's right and entitlements*".
- The Supreme Court has also observed that -
  - Advertisement materials **should be presented in an objective, fair and accessible manner** and designed to meet the objectives of the campaign,
  - Advertisement materials should be **objective and not directed at promoting political interests** of ruling party,
  - Advertisement Campaigns be **justified and undertaken in an efficient and cost-effective** manner, and
  - Government advertising must **comply with legal requirement and financial regulations** and procedures.

Administrative Rules for J&K

The Union Home Ministry has notified **new rules for administration in the Union Territory of Jammu and Kashmir (J&K)** that specify the functions of the Lieutenant-Governor (L-G) and the Council of Ministers.

What are the new rules?
- According to the transaction of business rules, "**police, public order, All India Services and anti-corruption**" will fall under the **executive functions of the L-G**, implying that the Chief Minister or the Council of Ministers will have no say in their functioning.
- The proposals or matters which affect or are likely to affect **peace and tranquillity or the interest of any minority community, the Scheduled Castes, the Scheduled Tribes and the Backward Classes** "shall essentially be submitted to the Lieutenant Governor through the Chief Secretary, under intimation to the Chief Minister, before issuing any orders".
- The **Council of Ministers**, led by the Chief Minister, will decide **service matters of non-All India Services officers, proposal to impose new tax, land revenue, sale grant or lease of government property, reconstituting departments or offices and draft legislation**.
- In case of difference of opinion between the L-G and a Minister, when no agreement could be reached even after a month, the "**decision of the Lieutenant Governor shall be deemed to have been accepted by the Council of Ministers**".
- The rules state that "any matter which is likely to bring the Government of the Union territory into controversy with the Central Government or with any State Government" shall, as soon as possible, **be brought to the notice of the L-G and the Chief Minister by the Secretary concerned through the Chief Secretary**.
- Under the rules, there will be **39 departments in the UT**, such as school education, agriculture, higher education, horticulture, election, general administration, home, mining, power, Public Works Department, tribal affairs and transport.
- The rules say all communications received from the Centre, including those from the Prime Minister and other Ministers, other than those of a routine or unimportant character, shall, as soon as possible after their receipt, be submitted by the Secretary to the Chief Secretary, the Minister in charge, the Chief Minister and the L-G for information.

Background -
- On August 6, 2019, Parliament read down Article 370 of the Constitution revoking the special status of J&K and bifurcated and downgraded the State into the Union Territories of J&K and Ladakh, with the former having a Legislative Assembly.
- The erstwhile State has been under Central rule since June 2018 and the elected Assembly was dissolved in November the same year. Union Home Minister Amit Shah, while introducing the legislation in Parliament last year, said J&K's Statehood would be restored soon.
- J&K has been without a Chief Minister since June 2018. According to the requirements of the J&K Reorganisation Act, 2019, fresh elections will be held after the delimitation exercise is completed next year.

ECONOMICS

Business Reform Action Plan

Union Minister of Finance Smt. Nirmala Sitharaman has announced the 4th edition of Business Reform Action Plan (BRAP) ranking of states.

Rankings -
The top ten states under State Reform Action Plan 2019 are - Andhra Pradesh, Uttar Pradesh, Telangana, Madhya Pradesh, Jharkhand, Chhattisgarh, Himachal Pradesh, Rajasthan, West Bengal and Gujarat.

About 'Business Reform Action Plan' -
- Ranking of States is based on the implementation of **Business Reform Action Plan** started in the year 2015. Till date, State Rankings have been released for the years 2015, 2016 and 2017-18.
- The Business Reform Action Plan 2018-19 **includes 180 reform points covering 12 business regulatory areas** such as **Access to Information, Single Window System, Labour, Environment, etc**.

- The larger objective of attracting investments and increasing Ease of Doing Business in each State was sought to be achieved by introducing an element of healthy competition through a system of ranking states based on their performance in the implementation of Business Reform Action Plan.
- The ranking this time gives full weightage to the feedback from over thirty thousand respondents at the ground level, who gave their opinion about the effectiveness of the reforms.
- State rankings will help attract investments, foster healthy competition and increase Ease of Doing Business in each State.
- The ranking of the states are announced by the **Department of Industrial Promotion and Internal Trade (DPIIT), under the Ministry of Commerce and Industry.**

RRTS Train

The first look **India's first RRTS (Region Rapid Transit System)** train was unveiled recently. It is an environment friendly, energy efficient train which will improve the quality of life in and around NCR by accelerating economic growth, creating economic opportunities and at the same time reducing air pollution, carbon footprint, congestion, and accidents.

About RRTS train -
- The state-of-the-art RRTS rolling stock will be first of its kind in India with **a design speed of 180 kmph.**
- With radiating **stainless steel outer body**, these aerodynamic RRTS trains will be l**ightweight and fully air-conditioned**.
- Each car will have six automatic plug-in type wide doors, three on each side (Business Class will have four such doors, two on each side) for ease of access and exit.
- The RRTS trains will have **transverse 2x2 seating** with adequate legroom, optimised aisle width with grab handles and grab poles for a comfortable journey for standing passengers, overhead luggage rack, mobile/laptop charging sockets and on board Wi-Fi among other commuter-centric features.
- RRTS rolling stock will have **lighting and temperature control systems** to enhance the passenger experience with **less energy consumption**. Equipped with modern amenities, the RRTS rolling stock will be a unique amalgamation of new-age technology and India's rich heritage.

Delhi-Ghaziabad-Meerut RRTS Corridor -
- The Delhi-Ghaziabad-Meerut RRTS corridor is **one of the three prioritised RRTS corridor** being implemented in phase-1.
- The 82 km long Delhi–Ghaziabad–Meerut Corridor is the **first RRTS corridor** being implemented in India.
- The corridor will **bring down the travel time** between Delhi to Meerut **by around 1/3rd**.
- The commute time from Delhi to Meerut **will be reduced to less than an hour** from 3-4 hours by road at present.

About NCRTC -
- National Capital Region Transport Corporation is **a joint venture** of the Government of India (50%) and State Governments of Haryana (12.5%), NCT Delhi (12.5%), Uttar Pradesh (12.5%) and Rajasthan (12.5%).
- It is mandated to design, construct, finance, operate and maintain RRTS in NCR and works under the administrative control of Ministry of Housing & Urban Affairs, GOI.
- NCRTC is mandated to implement **India's first RRTS in NCR**.

Draft Electricity (Rights of Consumers) Rules, 2020

Union Power Ministry has drafted Rules providing for **Rights of Electricity Consumers** for the First Time.

Features of draft Electricity (Rights of Consumers) Rules, 2020 -

The main features are –
- **Reliability of service -** SERCs to fix average number and duration of outages per consumer per year for DISCOMs.
- **Timely and simplified procedure for connection -** Only two documents for connection up to load of 10 kw and no estimation of demand charges for loads up to 150 kw to expedite giving connection.
- Time period of not more than 7 days in metro cities, 15 days in other municipal areas and 30 days in rural areas, to provide new connection and modify existing connection.
- 2 to 5% rebate on serving bills with delay of sixty days or more.
- Option to pay bills in cash, cheque, debit cards, net banking etc but bills of Rs. 1000 or more to be paid online.
- Provisions related to disconnection, reconnection, meter replacement, billing, payment, etc.
- Recognition to the emerging category of consumers known as "**Prosumers**". Persons who are consumers and have also set up a rooftop units or solarised their irrigation pumps. They will have **right to produce electricity for self-use and inject excess in the grid** using same point of connection up to limits prescribed by the SERC.
- **Compensation/penalties for delay in service by DISCOMs**; compensation to be automatic as far as possible, to be passed on in the bill.
- 24x7 toll free call centre, web-based and mobile applications for common services like new connection, disconnection, reconnection, shifting of connection, change in name and particulars, load change, replacement of meter, no supply, etc with facilities for sms/email alerts, online status tracking and auto escalation.
- **Consumer Grievance Redressal Forum** with 2-3 representatives of consumers at various levels starting from Sub-division for ease of consumer grievance redressal.

SAROD-Ports

Union Minister of State for Shipping Shri Mansukh Mandaviya has launched 'SAROD-Ports' (Society for Affordable Redressal of Disputes - Ports).

What is 'SAROD-Ports'?
- SAROD-Ports is established under **Societies Registration Act, 1860** with the following objectives -
  1. Affordable and timely resolution of disputes in fair manner.
  2. Enrichment of Dispute Resolution Mechanism with the panel of technical experts as arbitrators.
- SAROD-Ports consists members from **Indian Ports Association (IPA)** and **Indian Private Ports and Terminals Association (IPTTA)**.
- SAROD-Ports will **advise and assist in settlement of disputes through arbitrations in the maritime sector**, including ports and shipping sector in Major Port Trusts, Non-major Ports, including private ports, jetties, terminals and harbours.
- It will also **cover disputes between granting authority and Licensee/Concessionaire/ Contractor and also disputes between Licensee/Concessionaire and their contractors** arising out of and during the course of execution of various contracts.
- 'SAROD-Ports' is **similar to** provision available in **Highway Sector** in the form of **SAROD-Roads** constituted by NHAI.

Backgrounder -
The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved amendments in the Model Concession Agreement (MCA). In January,2018.The amendments in the MCA, envisaged constitution SAROD-PORTS as dispute resolution mechanism for PPP Projects in the Major Ports.

Global Innovation Index

India has climbed 4 spots and has been **ranked 48th by the World Intellectual Property Organisation in the Global Innovation Index 2020 rankings**.

Details -
- India was at the **52nd position in 2019** and was **ranked 81st in the year 2015**. It is a remarkable achievement to be in a league of highly innovative developed nations all over the globe.
- The WIPO had also **accepted India as one of the leading innovation achievers of 2019** in the **central and southern Asian region**, as it has shown a consistent improvement in its innovation ranking for the last 5 years.
- India is also the **third most innovative lower middle-income economy** in the world, ranking in the top 15 in indicators such as **ICT services exports, government online services, graduates in science and engineering, and R&D-intensive global companies**.

About Global Innovation Index -
- The **Global Innovation Index (GII)** is an **annual ranking of countries** by their capacity for, and success in, innovation. It is published by **Cornell University, INSEAD, and the World Intellectual Property Organization**, in partnership with other organisations and institutions.
- The index was **started in 2007 by INSEAD and World Business**, a British magazine. The GII is commonly used by corporate and government officials to compare countries by their level of innovation.
- The theme for this year's GII was '*Who Will Finance Innovation?*' It looked to see how the fall out from the COVID-19 pandemic would affect several sections of funding innovation including, startups, venture capital, and other traditional sources of innovation financing.
- **Switzerland, Sweden, US, UK and Netherlands** topped the annual ranking this year. As per the organisation, **India, China, the Philippines, and Vietnam** have been the economies with the most significant progress in their GII innovation ranking over the years. All four are now in the top 50.

About India Innovation Index -
- **NITI Aayog and Institute for Competitiveness** prepared the **India Innovation Index** in the year 2019 on the basis of its two dimensions – **Performance and Enablers**.
- The Enablers are the factors that underpin innovative capacities, grouped in five pillars - **Human Capital, Investment, Knowledge Workers, Business Environment, and Safety and Legal Environment**.
- The Performance dimension captures benefits that a nation derives from the inputs, divided in two pillars - **Knowledge Output and Knowledge Diffusion**.
- **Karnataka** emerged **topper in the overall rankings** in the **category of major states.** with Tamil Nadu and Maharashtra in the second and third positions.

SOCIAL ISSUES

ASIIM

Union Minister for Social Justice and Empowerment Shri Thaawarchand Gehlot has launched the 'Ambedkar Social Innovation and Incubation Mission' (ASIIM) under Venture Capital Fund for SC's with a view to promote innovation and enterprise among SC students studying in higher educational institutions.

About the scheme -
- ASIIM will be set up through th**e Venture Capital Fund for Scheduled Castes (VCFSC)**.
- It's objective is to include -
    - To promote entrepreneurship among the SC Youth with special preference to Divyangs;
    - To support (1,000) innovative ideas till 2024 through a synergetic work with the Technology Business Incubators (TBIs) set up by Department of Science and Technology;
    - To support, promote, hand-hold the start-up ideas till they reach commercial stage by providing liberal equity support; and
    - To incentivise students with innovative mind-set to take to entrepreneurship with confidence.

- The ASIIM initiative will be implemented by the Venture Capital Fund for SCs (VCF-SCs) which was set up in 2016 with the Fund size of Rs. 500 crores.
- Under this initiative VCF-SC shall target SC students / young entrepreneurs working in Technology Business Incubators (TBIs) **supported by Department of Science and Technology (DST)** in higher education and technology institution including Business / Management schools. The VCF-SC shall extend all support in the form of hand-holding, guidance, mentoring, besides providing equity support up to Rs 30 lakh over a period of three (3) years to each entity of young SC students / entrepreneurs. The budget of ASIIM for the next four years has been kept at Rs 19320lakhs.

New versions of Labour Code

The government has introduced new versions of three labour codes – **Industrial Relations Code Bill, 2020, Code on Social Security Bill, 2020 and Occupational Safety, Health and Working Conditions Code Bill, 2020** —in the Parliament.
While it proposes to **increase the ambit of social security by including gig workers and inter-state migrant workers**, it has also proposed measures that will provide **greater flexibility to employers to hire and fire workers without government permission**.

What are the key proposals?
- In the **Industrial Relations Code Bill, 2020,** the government has proposed to *introduce more conditions restricting the rights of workers to strike, alongside an increase in the threshold relating to layoffs and retrenchment in industrial establishments having 300 workers from 100 workers or more at present* — steps that are likely to provide more flexibility to employers for hiring and firing workers without government permission.
- The **Industrial Relations Code** has raised the threshold for requirement of a standing order — rules of conduct for workmen employed in industrial establishments — **to over 300 workers**. This implies *industrial establishments with up to 300 workers will not be required to furnish a standing order*, a move which experts say would enable companies to introduce arbitrary service conditions for workers.
- **The Standing Committee on Labour, in its report submitted in April, had also suggested hiking the threshold to 300 workers**, noting that some state governments like Rajasthan had already increased the threshold and which, according to the Labour Ministry, has **resulted in** "**an increase in employment and decrease in retrenchment"**. "The Committee desires that the threshold be increased accordingly in the Code itself and the words "as may be notified by the Appropriate Government" be removed because reform of labour laws through the executive route is undesirable and should be avoided to the extent possible," it had said.
- The Industrial Relations Code states that the provision for standing order will be applicable for "*every industrial establishment wherein three hundred or more than three hundred workers, are employed, or were employed on any day of the preceding twelve months*".

What are the concerns raised over the new labour codes?
- Analysts say the **increase in the threshold for standing orders will water down the labour rights for workers in small establishments having less than 300 workers**.
- The Industrial Relations Code also introduces **new conditions for carrying out a legal strike**. The time period for arbitration proceedings has been included in the conditions for workers before going on a legal strike as against only the time for conciliation at present.
- For instance, the **IR Code proposes that no person employed in an industrial establishment shall go on strike without a 60-day notice** and during the pendency of proceedings before a Tribunal or a National Industrial Tribunal and sixty days after the conclusion of such proceedings. Thus, **elongating the legally permissible time frame before the workers can go on a legal strike**, making a legal strike well-nigh impossible.
- The IR code has expanded to **cover all industrial establishments for the required notice period and other conditions for a legal strike**. The Standing Committee on Labour had recommended against the expansion of the required notice period for strike beyond the public utility services like water, electricity, natural gas, telephone and other essential services.

- At present, a person employed in a public utility service cannot go on strike unless he gives notice for a strike within six weeks before going on strike or within fourteen days of giving such notice, which the IR Code now proposes to apply for all the industrial establishments.

What are the other proposals for workers?
- The IR Code Bill has also **proposed a worker re-skilling fund**, though the contributions for the fund are only detailed from the employer of an industrial establishment **amounting to fifteen days wages last drawn by the worker** immediately before the retrenchment along with the contribution from such other sources. The mention of '**other sources**' for funding the re-skilling fund, experts said, is vague.
- The other two codes have also proposed changes for **expanding social security and inclusion of inter-state migrant workers in the definition of workers**. The Social Security Code proposes a **National Social Security Board** which shall recommend to the central government for formulating suitable schemes for different sections of unorganised workers, gig workers and platform workers. Also, **aggregators employing gig workers will have to contribute 1-2 per cent of their annual turnover for social security, with the total contribution not exceeding 5 per cent of the amount payable** by the aggregator to gig and platform workers.
- **The Occupational Safety, Health and Working Conditions Code** has defined inter-state migrant workers as the worker who has come on his own from one state and obtained employment in another state, earning up to Rs 18,000 a month. The proposed definition makes a distinction from the present definition of only contractual employment.
- The Code, however, has dropped the earlier provision for temporary accommodation for workers near the worksites. It has though proposed a journey allowance — a lump sum amount of fare to be paid by the employer for to and fro journey of the worker to his/her native place from the place of his/her employment.

Pradhan Mantri Jan Vikas Karyakram

The Pradhan Mantri Jan Vikas Karyakram (PMJVK) has been restructured in 2018 and is now being implemented in 1300 identified Minority Concentration Areas, with an objective of developing socio-economic infrastructure and basic amenities in the said areas.
For larger coverage of the scheme, the areas under PMJVK have been increased from 90 Districts originally to 308 Districts of the country, which include 870 Blocks, 321 Towns and 109 District Headquarters.

About Pradhan Mantri Jan Vikas Karyakram -
- The erstwhile **Multi-sectoral Development Programme (MsDP)**, a centrally sponsored scheme has been **restructured and renamed as Pradhan Mantri Jan Vikas Karyakram**.
- MsDP, **a centrally sponsored scheme**, launched **to address the development deficits in 90 minority concentration districts** in the country to address the development deficits.
- It has been identified as **one of the Core of the Core Schemes** under National Development Agenda.
- It aims at improving the **socio-economic parameters of basic amenities** for improving the quality of life of the people and reducing imbalances **in the Minority Concentration Areas**.
- Minority Concentration Areas have been identified based on both **population data** (25% of the total population belongs to minority communities) and **backwardness parameters of Census 2001** of these areas.
- The backwardness parameters are -
    - Religion-specific socio-economic indicators at the district level –
        - Literacy rate;
        - Female literacy rate ;
        - Work participation rate; and
        - Female work participation rate; and
    - Basic amenities indicators at the district level –
        - Percentage of households with pucca walls'
        - Percentage of households with safe drinking water &
        - Percentage of households with electricity

- The **projects considered** are additional class rooms, laboratories, school buildings, hostels, toilets, buildings for Polytechnics, ITIs, Community Health Centres, Primary Health Centres / Sub-centres, Anganwadi Centres, Rural Housing etc.
- **Education, Health and Skill** are the priority under MsDP.
- The projects are funded in the **ratio of 60:40** and **for NE and Hilly States at 90:10** between the Centre and States.

Global Multidimensional Poverty Index

NITI Aayog as the nodal agency has been assigned the responsibility of leveraging the monitoring mechanism of the Global Multidimensional Poverty Index (MPI) to drive reforms. Global MPI is part of Government of India's decision to monitor the performance of the country in 29 select Global Indices.

Objective -
The objective of the "**Global Indices to Drive Reforms and Growth (GIRG)**" exercise is to fulfil the need to measure and monitor India's performance on various important social and economic parameters and enable the utilisation of these Indices as tools for self-improvement, bring about reforms in policies, while improving last-mile implementation of government schemes.

What is Global MPI?
- Global MPI is **an international measure of multidimensional poverty** covering 107 developing countries and was **first developed in 2010 by Oxford Poverty and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP)** for UNDP's Human Development Reports.
- The Global MPI is released at the High-Level Political Forum (HLPF) on Sustainable Development of the United Nations in July, every year.
- Global MPI is **computed** by scoring each surveyed household on **10 parameters** based on - *nutrition, child mortality, years of schooling, school attendance, cooking fuel, sanitation, drinking water, electricity, housing and household assets*.
- It utilises the **National Family Health Survey (NFHS)** which is conducted under the aegis of Ministry of Health and Family Welfare (MoHFW) and International Institute for Population Sciences (IIPS).

Performance of India -
- According to Global MPI 2020, **India is 62nd among 107 countries with an MPI score of 0.123 and 27.91% headcount ratio**, based on the NFHS 4 (2015/16) data.
- Neighbouring countries like Sri Lanka (25th), Bhutan (68th), Nepal (65th), Bangladesh (58th), China (30th), Myanmar (69th) and Pakistan (73rd) are also ranked in this index.
- The latest NFHS 5 (2019/20) is set to see remarkable national improvement brought about by focused schemes and interventions in these parameters since NFHS 4, especially in sanitation, cooking fuel, housing, drinking water and electricity. The survey has been paused due to the COVID-19 pandemic.

INTERNATIONAL RELATIONS

US-India 2020 Summit by USISPF

Prime Minister Shri Narendra Modi today delivered the Special Key Note Address at the US-India 2020 Summit organised by the USISPF.

What is USISPF?
- The **US-India Strategic Partnership Forum (USISPF)** is a **non-profit organisation** that works for the bilateral and strategic partnership between India and the US.

- The Theme of the 5 day Summit that began on the 31st of August (2020) is "***US-India Navigating New Challenges***".
- The theme covers various subjects such as India's potential in becoming a **Global Manufacturing Hub, Opportunities in India's Gas Market, Ease of Doing Business to attract FDI in India, Common Opportunities & Challenges in Tech Space, Indo-Pacific Economic issues, Innovation in Public Health and others**.
- The **Executive Board came together in 2017 to establish USISPF** with the purpose of enabling business and governments to collaborate and create meaningful opportunities that can positively change the lives of citizens.
- Dedicated to **strengthening economic and commercial ties**, USISPF plays a significant role in fostering a robust and dynamic relationship between the two countries through policy advocacy that will lead to driving **economic growth, entrepreneurship, employment-creation, and innovation** to create a more inclusive society.

G4 Members

Foreign Ministers from the Group of 4 — India, Brazil, Japan and Germany — a group that is seeking permanent membership of the UN Security Council (UNSC), met recently to further their objective. The four countries stressed delivering concrete outcomes, in writing and within a time frame.

Joint Statement -
- The Ministers reaffirmed their common resolve to "*finally take decisive steps towards the early and comprehensive reform of the Security Council that was envisaged by Heads of State and Government in the 2005 World Summit*".
- The G4 will work with "**other reform-minded countries and groups**" to start **text-based negotiations (TBN)** without delay and seek "**concrete outcomes**" during the 75th session of the UN General Assembly.
- G4 Ministers reiterated **support for each other's membership to the UNSC** "given the capacity and willingness to take on major responsibilities with regard to the maintenance of international peace and security".
- Africa needs to be represented in **both the permanent and non-permanent categories** of membership of a reformed and expanded Security Council to correct the historical injustice against this continent with regard to its under-representation in the Security Council," the G4 countries said.

About G-4 countries -
- The G4 was formed in the year 2004. The members of the G4 countries include - India, Brazil, Germany and Japan. All members support each other's bids for permanent seats on the United Nations Security Council.
- Their economic and political influence has grown significantly in the last decades, reaching a scope comparable to the permanent members (P5)
- G4 campaigns for UN Reforms, including **more representation for developing countries**, both in the permanent and non-permanent categories in the UNSC.
- **France supports inclusion of G4 and an African representative** as permanent member with no objection to the veto power being extended to new permanent members. **UK supports G4 as new members but without veto power**.
- G4's bids are often opposed by **Uniting for Consensus movement or Coffee Club** (ground 12 countries including Pakistan led by Italy) and particularly their economic competitors or political rivals.

Singapore Convention on Mediation

The Singapore Convention on Mediation came into force recently and will **provide a more effective way for enforcing mediated settlements of corporate disputes** involving businesses in India and other countries that are signatories to the Convention.

About the Singapore Convention on Mediation -
- Also known as the **United Nations Convention on International Settlement Agreements Resulting from Mediation**, this is also the first UN treaty to be named after Singapore.
- With the Convention in force, businesses seeking enforcement of a mediated settlement agreement across borders can do so by **applying directly to the courts of countries that have signed and ratified the treaty**, instead of having to enforce the settlement agreement as a contract in accordance with each country's domestic process.
- As on September 1, 2020, the Convention has 53 signatories, **including India, China and the U.S**.
- Singapore had worked with the **UN Commission on International Trade Law**, other UN member states and non-governmental organisations for the Convention.

Significance -
- The harmonised and simplified enforcement framework under the Convention translates to savings in time and legal costs, which is important for businesses in times of uncertainty.
- Businesses in India and around the world will now have greater certainty in resolving cross-border disputes through mediation, as the Convention provides a more effective means for mediated outcomes to be enforced.
- The Convention would boost India's 'ease of doing business' credentials by enabling swift mediated settlements of corporate disputes.

SCO, CSTO and CIS

Raksha Mantri Rajnath Singh has emphasised that, "*Peaceful, stable and secure region of SCO member states – which is home to over 40 per cent of global population, demands a climate of trust and cooperation, non-aggression, respect for international rules and norms, sensitivity to each other's interest and peaceful resolution of differences*."

He was addressing the **Combined Meeting of Defence Ministers** of **Shanghai Cooperation Organisation (SCO), Collective Security Treaty Organisation (CSTO) and Commonwealth of Independent States (CIS)** Member States in Moscow.

What is SCO?
- SCO is a **permanent intergovernmental international organisation**.
- It is a Eurasian political, economic and military organisation aiming **to maintain peace, security and stability in the region**.
- It was created in **2001**. The HQ is located in Beijing, China.
- Prior to the creation of SCO in 2001, Kazakhstan, China, Kyrgyzstan, Russia and Tajikistan were members of the **Shanghai Five (1996)**.
- **Following the accession of Uzbekistan** to the organisation in 2001, the Shanghai Five was renamed the SCO**.**
- The SCO Charter was **signed in 2002**, and entered into force in 2003.
- The SCO's official languages are **Russian and Chinese**.
- India and Pakistan became members in 2017.

What is CSTO?
- The Collective Security Treaty Organization is **an intergovernmental military alliance** that was signed in 1992. The treaty **came into force in 1994**.
- It was signed by six countries: **Armenia, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan**. Subsequently, **Azerbaijan, Georgia and Belarus** joined it.
- The CST was **set to last for a 5-year period unless extended**. In 1999, only six members of the CST signed a protocol renewing the treaty for another five-year period: Azerbaijan, Georgia and Uzbekistan refused to sign and withdrew from the treaty.

- It was decided to transform the CST into **a full international organisation**, the Collective Security Treaty Organization (CSTO) **at the Moscow session** of the Collective Security Treaty in 2002.
- The **Serbia and Afghanistan** have been accorded observer status in the CSTO.
- Armenia, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Belarus are the current full member countries of CSTO.

What is CIS?
- Commonwealth of Independent States (CIS) was created in December 1991. In the adopted Declaration the participants of the Commonwealth declared their interaction on the basis of sovereign equality.
- At present the CIS unites: **Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan and Ukraine**.
- In September 1993 the Heads of the CIS States signed an Agreement on the **creation of Economic Union** to form **common economic space** grounded on free movement of goods, services, labour force, capital; to elaborate coordinated monetary, tax, price, customs, external economic policy; to bring together methods of regulating economic activity and create favourable conditions for the development of direct production relations.
- In order to facilitate further integration the **Agreement on deepening of integration in economic and humanitarian field** of four countries (Belarus, Kazakhstan, Kyrgyzstan, Russia) and Agreement on creation of Commonwealth of Sovereign Republics (Belarus and Russia) with creation of corresponding coordinating bodies were signed in 1995.
- In February 1999 by the decision of the Interstate Council of four countries (Belarus, Kazakhstan, Kyrgyzstan, Russia) the **Republic of Tajikistan was recognised as participant of the customs union** enjoying full rights.
- In October 2000 the Heads of five countries (Belarus, Kazakhstan, Kyrgyzstan, Russia, Tajikistan) signed an Agreement on creation of **Eurasian Economic Community**. At present Armenia, Moldova and Ukraine have the status of the observer under EAEC. In October 2005 Uzbekistan made the statement to join this organisation.
- In September 2003 four countries - **Belarus, Kazakhstan, Russia and Ukraine** signed an Agreement on Formation of **CES (Common Economic Space)**.
- Integration of the countries in the framework of the Commonwealth of Independent States is executed through its coordinating institutions (charter bodies, executive bodies and the bodies of branch cooperation of the CIS).
- The Baltic states of Lithuania, Latvia and Estonia have never been a part of CIS, even if they were a part of Former Soviet Union.

ENVIRONMENT

Project Dolphin

In his Independence Day speech this year, Prime Minister Narendra Modi announced the government's plan to launch a Project Dolphin. The proposed project is aimed at saving both river and marine dolphins.

How 'Project Dolphin' will help?
- Project Dolphin will be on the lines of Project Tiger. During the first meeting of the National Ganga Council (NGC), headed by the Prime Minister, it was said that "*Special Conservation program needs to be taken up for Gangetic Dolphin which is national aquatic animal and also indicator species for the river Ganga spread over several states*," state the minutes of meeting.
- So far, the National Mission for Clean Ganga (NMCG), which implements the government's flagship scheme Namami Gange, has been taking some initiatives for saving dolphins. Now, Project Dolphin is expected to be implemented by the Ministry of Environment, Forest and Climate Change.

What is the Gangetic dolphin?

- The Gangetic river system is home to a vast variety of aquatic life, including the **Gangetic dolphin (Platanista gangetica)**. The Gangetic dolphin is **one of five species of river dolphin** found around the world. It is found mainly in the Indian subcontinent, particularly i**n Ganga-Brahmaputra-Meghna and Karnaphuli-Sangu** river systems.
- The Conservation Action Plan for the Ganges River Dolphin, 2010-2020, describes male dolphins as being about 2-2.2 metres long and females as a little longer at 2.4-2.6 m. An adult dolphin could weigh between 70 kg and 90 kg. The breeding season of the Gangetic dolphin extends from January to June. They feed on several species of fishes, invertebrates etc.

Efforts to save 'dolphin' till now -
The Gangetic dolphin remains listed as **endangered** by the **International Union for the Conservation of Nature**.

- **WILDLIFE ACT PROTECTION -** After the launch of Ganga Action Plan in 1985, the government on November 24, 1986 included Gangetic dolphins in the **First Schedule of the Indian Wildlife (Protection), Act 1972**. This was aimed at checking hunting and providing conservation facilities such as wildlife sanctuaries. For instance, Vikramshila Ganges Dolphin Sanctuary was established in Bihar under this Act.
- **CONSERVATION PLAN -** The government also prepared **The Conservation Action Plan** for the Ganges River Dolphin 2010-2020, which "identified threats to Gangetic Dolphins and impact of river traffic, irrigation canals and depletion of prey-base on Dolphins populations".
- **NATIONAL AQUATIC ANIMAL -** On October 5, 2009, the then Prime Minister Manmohan Singh, while chairing the maiden meeting of the National Ganga River Basin Authority, declared the **Gangetic river dolphin as the national aquatic animal**. Now, the National Mission for Clean Ganga celebrates **October 5 as National Ganga River Dolphin Day**.

Blue-Flag Certification

On the eve of International Coastal Clean-Up Day which is celebrated across 100 countries since 1986, Union Ministry of Environment, Forest and Climate Change (MoEFCC) announced at a virtual event that for the first time eight beaches of India are recommended for the coveted International eco-label, the Blue flag certification.

BEAM Eco-label -
- The event also saw the launch India's own eco-label **BEAMS**.
- Society for Integrated Coastal Management (SICOM), MoEFCC in pursuit of promoting its policies for sustainable development in coastal regions have embarked upon a highly acclaimed program "**BEAMS" (Beach Environment & Aesthetics Management Services) under its ICZM (Integrated Coastal Zone Management) project**.
- This is one of the several other projects of ICZM that Government of India is undertaking for the **sustainable development of coastal regions**, striving for globally recognised and the coveted eco-label '**Blue flag**".
- The **objective of BEAMS program** is to abate pollution in coastal waters, promote sustainable development of beach facilities, protect & conserve coastal ecosystems & natural resources, and seriously challenge local authorities & stakeholders to strive and maintain high standards of cleanliness, hygiene & safety for beachgoers in accordance with coastal environment & regulations. **This program promotes beach recreation in absolute harmony with nature**.

What is Integrated Coastal Zone Management?
- With a view to protect and conserve the coastal and marine ecosystems and environment through a holistic coastal management, the Ministry of Environment, Forests & Climate Change launched the **Integrated Coastal Zone Management (ICZM)** activities in India for a holistic approach with an interactive, dynamic, multidisciplinary, and iterative planning process to promote sustainable development & management of coastal zones through its own wing SICOM.
- The concept of ICZM was **introduced in 1992 during the Earth Summit at Rio de Janeiro** and most of the coastal countries in the World have been adopting ICZM principles for managing their coastal zones. Thus, adoption of ICZM principles for managing and sustainably developing

our coastal regions is helping India in keeping with its commitments to international agreements on ICZM.

What is 'Blue Flag' certification?
- The 'Blue Flag' is a certification that can be **obtained by a beach, marina, or sustainable boating tourism operator, and serves as an eco-label**.
- The certification is **awarded by the Denmark-based non-profit Foundation for Environmental Education (FEE)**, which sets stringent environmental, educational, safety-related and access-related criteria that applicants must meet and maintain. It is awarded annually to beaches and marinas in FEE member countries.
- The world-renowned certification is known as **an indication of high environmental and quality standards**.
- Forty-seven countries currently participate in the program, and 4,573 beaches, marinas, and boats have this certification.

Management of air pollution

Principal Secretary to Prime Minister Dr. P. K. Mishra chaired the meeting of the **High Level Task force** constituted **to improve the air quality in National Capital Region of Delh**i.
Chief Secretaries of Delhi, Punjab, Haryana, Rajasthan and Uttar Pradesh, Secretaries of different department/ministries of the central government including M/o of Environment, Forest & Climate Change, Agriculture, Road, Petroleum and Central Pollution Control Board were present in the meeting.

Details of the meeting -
- A review of the main sources of air pollution, measures taken and the progress made by the State Governments and various Ministries was carried out. It was noted that the **incidence of stubble burning has reduced by more than 50% in last two years** and the **number of Good AQI days have gone up**.
- The efforts and plan made by the State of Punjab, Haryana and Uttar Pradesh for control of crop residue burning were examined in detail, including ground level deployment and availability of machinery for in-situ management of crop residue.
- It was observed that **after recent inclusion of residue based power /fuel plants under priority sector lending by Reserve Bank of India**, both State and Central Governments should jointly work out action plans for rapid deployment of such units. Measures related to **diversification of crop and strengthening of supply chains** were also discussed.
- Principal Secretary highlighted the **importance of effective implementation of the existing in-situ management of crop residue scheme of Ministry of Agriculture** by the States, and emphasised that **State Governments should ensure that the new machinery to be deployed in the current year should reach the farmers before the start of the harvesting season**. Ministry of Agriculture was directed to provide all necessary support in this regard.
- To control stubble burning, it was stressed that **adequate number of teams should be deployed** at ground level and they should ensure that **no stubble burning takes place especially in the State of Punjab, Haryana and UP**. These States need to put extra efforts and appropriate incentives especially in the relevant districts.
- **Government of GNCT-Delhi** was requested to ensure measures to **control local sources of pollution**. Principal Secretary mentioned that special emphasis should be laid on **deployment of teams for control of open burning of waste, IT-enabled monitoring of mechanical road sweepers, improvement in utilisation of construction & demolition waste and site specific implementation of action plan for identified hot spots**. It was decided that Haryana and Uttar Pradesh would prepare and implement similar site specific action plans in their area falling under NCR.

About in-situ management of crop residue -
- A special scheme to support the efforts of the **Governments of Punjab, Haryana and Uttar Pradesh and NCT of Delhi** to address air pollution and to **subsidise machinery** required for in-situ management of crop residue for the period 2018-19 to 2019-20 was approved.

- The scheme is **a Central Sector Scheme (100% Central share)** being implemented by the **Ministry of Agriculture & Farmers Welfare**.
- **Components of the Scheme -**
  - Establish **Farm Machinery Banks** for Custom Hiring of in-situ crop residue management machinery. **Financial assistance @80% of the project cost** will be provided to the **cooperative societies of the farmers, FPOs, Self Help Groups, Registered Farmers Societies/ Farmers Group, Private Entrepreneurs, Group of Women Farmers**.
  - The financial assistance for establishment of **Custom Hiring Centre** will be limited to the maximum project cost of Rs 75.00 lakhs out of which the **in-situ crop residue management implements component cost would be at least 35% of the project cost**.
  - The remaining other 65% project cost may include **other machinery and equipment for crop production** for which financial assistance will be available as per the pattern of assistance under Sub-Mission on Agricultural Mechanisation i.e. @ 40% of the project cost.
  - Financial Assistance to the farmers for Procurement of Agriculture Machinery and Equipment for in-situ crop residue management. **Financial assistance @50% of the machinery/ equipment will be provided to individual farmer for crop residue management**.
- **Beneficiaries -**
  - Respective State Governments through **District Level Executive Committee (DLEC)** will **identify various beneficiaries and location-specific agricultural equipment** depending on the farming system and will identify and select beneficiaries for establishment of Farm Machinery Bank for Custom Hiring and procurement of machines on individual ownership basis to avail the benefit in transparent and time bound manner.
  - **The State Nodal Department / DLEC may tie up with the Banks for credit requirements** of the beneficiaries. Name and details of selected beneficiaries will be documented at district level indicating Aadhar/UID numbers and the financial assistance will be paid through Direct Benefit Transfer (DBT).
- **Implementing Agencies -**
  - **At the Central level** the scheme will be administered by **Department of Agriculture, Cooperation and Farmers Welfare**.
  - A **National Steering Committee** headed by Secretary, DAC&FW will formulate the policy and give overall directions and guidance to the implementation of the scheme by the State Government and will monitor and review its progress and performance.
  - Executive Committee chaired by Additional Secretary will oversee the activities of the scheme.
  - **At the State level** the nodal implementing agency will be the **Department of Agriculture of the concerned State Government.** State Level Executive Committee (SLEC) chaired by **Principle Secretary (Agriculture)/ Agriculture Production Commissioner** shall oversee the implementation of the scheme in their State through regular meeting and will provide inputs to Executive Committee for appropriate policy formulation. The SLEC shall ensure that no crop residue burning takes place in the farmer field.
  - **The District Level Executive Committee** shall be responsible for carrying forward the objectives of the scheme for project formulation, implementation and monitoring in the districts and will constitute Surveillance Committees involving farmers group / progressive farmers to mobilise farmers for not burning the crop residue and will also ensure active participation of Panchayati Raj Institutions.
  - The DAC&FW will **empanel the manufacturer of machines and equipment**, identified for in-situ management of crop residue along with their costs.

SCIENCE AND TECHNOLOGY

Himalayan Chandra Telescope

In the cold, dry desert of Ladakh, 4500 meters above the mean sea level, for two decades, the 2-m diameter optical-infrared Himalayan Chandra Telescope (HCT) at the Indian Astronomical

Observatory (IAO) has been scanning the night sky in search of stellar explosions, comets, asteroids, and exo-planets.

About Himalayan-Chandra Telescope -
- The Himalayan Chandra Telescope is a 2.01-meter (6.5 feet) diameter **optical-infrared telescope** named after India-born Nobel laureate **Subrahmanyam Chandrasekhar**.
- It was installed at the Indian Astronomical Observatory (IAO), Mt. Saraswati, Digpa-ratsa Ri, Hanle, Ladakh at an altitude of 4500 m (15000 ft) above mean sea level (msl) by the **Indian Institute of Astrophysics (IIA), Bangalore**, in August 2000.
- Its primary goal is to **study electromagnetic counterparts to gravitational wave sources**, **young supernovae and near-earth asteroids**.
- It contains a modified **Ritchey-Chretien system** with a primary mirror made of ULE ceramic which is designed to withstand low temperatures it experiences.
- The telescope is mounted with 3 science instruments called - Himalaya Faint Object Spectrograph (HFOSC), Near-IR imager and Optical CCD imager.
- The telescope is **remotely operated via an INSAT-3B satellite link** which allows operation even in sub-zero temperatures in winter.
- This dedicated link is provided by the Centre for Research & Education in Science & Technology (CREST), Indian Institute of Astrophysics, Bangalore.
- It is the **country's first robotic telescope** and the first one designed to observe dynamic or transient events in the universe.

Hypersonic Technology Demonstrator Vehicle

Defence Research and Development Organisation (DRDO) has successfully demonstrated the hypersonic air-breathing scramjet technology with the flight test of Hypersonic Technology Demonstration Vehicle (HSTDV) from Dr APJ Abdul Kalam Launch Complex at Wheeler Island, off the coast of Odisha.

India has become the fourth country in the world to test hypersonic technology vehicle after US, Russia and China.

What is HSTDV?
- Hypersonic Technology Demonstrator Vehicle (HSTDV) is **an unmanned scramjet vehicle** with a capability to **travel at six times the speed of sound**.
- The scramjets are a variant of a category of **jet engines called the air breathing engines**. The ability of engines to **handle airflows of speeds in multiples of speed of sound**, gives it a capability of operating at those speeds.
- **Hypersonic speeds** are those which are **five times or more than the speed of sound**. The unit tested by the DRDO can achieve upto six times the speed of sound or Mach 6, which is well over 7000 kilometres per hour or around two kilometres per second.

About 'ramjet', 'scramjet' and 'dual mode ramjet' engines -
- A ramjet is a form of **air-breathing jet engine** that **uses the vehicle's forward motion to compress incoming air for combustion** without a rotating compressor. Fuel is injected in the combustion chamber where it mixes with the hot compressed air and ignites.
- A ramjet-powered vehicle **requires an assisted take-off like a rocket assist** to accelerate it to a speed where it begins to produce thrust.
- Ramjets work most efficiently at **supersonic speeds around Mach 3** (three times the speed of sound) and **can operate up to speeds of Mach 6**. However, the ramjet efficiency starts to drop when the vehicle reaches hypersonic speeds.
- A **scramjet engine** is an improvement over the ramjet engine as it efficiently **operates at hypersonic speeds** and allows supersonic combustion. Thus it is known as **Supersonic Combustion Ramjet, or Scramjet**.
- A **dual mode ramjet (DMRJ)** is a type of jet engine where **a ramjet transforms into scramjet** over Mach 4-8 range, which means it can efficiently operate both in subsonic and supersonic combustor modes.

Methane Hydrate

Recent research has found that the methane hydrate deposits located in the Krishna-Godavari basin are of biogenic origin. The methane hydrate deposit in the Krishna-Godavari basin is a rich source that will ensure adequate supplies of methane, a natural gas.

Details -
Methane is a **clean and economical fuel**. It is estimated that **one cubic meter of methane hydrate contains 160-180 cubic meters of methane**. Even the lowest estimate of methane present in the methane hydrates in KG Basin is twice that of all fossil fuel reserves available worldwide.

What is 'methane hydrate'?
Methane hydrate is formed **when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures** in oceans.

What are 'gas hydrates'?
- They are **formed when a gas such as methane gets trapped in well-defined cages of water molecules** forming crystalline solids. It is **a solid ice-like form of water** that contains gas molecules in its molecular cavities.
- Natural gas hydrates **occur on continental margins and shelves** worldwide from Polar Regions to the tropics.
- Gas hydrate reservoirs are generally **associated with biologically rich cold seep ecosystems at the seafloor**. Cold seeps are locations where hydrocarbon-rich fluid seeps up from below the sea floor, often as methane or hydrogen sulphide.
- It is estimated that **total amount of carbon in the form of methane hydrates, far exceeds the carbon content in all the fossil fuel reserves put together** and hence these are supposed to be the future potential energy resource.
- **Combustion of methane, is more CO_2 efficient** than that of any other hydrocarbon. Hence, using methane from gas hydrate compared to other hydrocarbons is **relatively climate friendly**.
- According to the latest estimates of the US Geological Survey, India has the **second largest gas hydrate reserves after America**. The Krishna-Godavari (KG), Cauvery and Kerala basins alone have 100-130 trillion cubic feet of estimated reserves.

Extraction of gas hydrates -
- The natural gas from gas hydrate can be produced via -
  - **Depressurisation** - Drilling of hole into the layer of hydrate and reducing the pressure beneath. This technique is implemented for hydrates only in polar regions beneath the permafrost.
  - **Thermal stimulation** - via steam injection, hot brine solution etc. that raises the temperature of the local reservoir outside the hydrate region to cause the dissociation of the hydrate, thus releasing free gas which can be collected.
- However, no country in the world has so far developed the technology to produce gas hydrates commercially and economically.
- Gas hydrates are also important for seafloor stability studies, because "melting" gas hydrate may cause seafloor "land" slides. Methane released from gas hydrate may therefore play a significant role in climate change.

Coal Gasification

India aims for 100 million tonnes (MT) coal gasification by 2030 with investments worth over Rs 4 lakh crores, the Union Minister of Coal and Mines has confirmed.

Details -
For encouraging use of clean sources of fuel, government has provided for **a concession of 20% on revenue share of coal used for gasification**. It will boost production of **synthetic natural gas, energy fuel, urea for fertilisers** and production of other chemicals.

What is 'coal gasification'?
- The coal gasification is the process of **converting coal into synthetic gas**, which is a mixture of hydrogen, carbon monoxide and carbon dioxide.
- This can be used in a variety of applications such as in the production of electricity and making chemical products, such as fertilisers.

Benefits -
- The process of **Coal Gasification** chemically transforms coal into **Synthetic Natural Gas (SNG)**, instead of burning the coal. It produces **Syngas** which is a mixture consisting primarily of **methane (CH_4), carbon monoxide (CO), hydrogen (H_2), carbon dioxide (CO_2) and water vapour (H_2O)**.
- India imports 50-100 lakh tonnes of urea every year, hence the revival of energy plants using coal gasification technology will help increase availability of domestically produced fertilisers.
- With coal being the most abundantly available fossil fuel across the world, the potential of coal gasification is huge. Even low grade coal can be used in this process.
- This process is around **17 to 20% more efficient than conventional coal-burning** to produce electricity. Hence, it reduces the dependency on coal mining for energy generating power plants.
- **It can be used in hydrogen fuel cell production** because gasification of coal is one method that can produce power liquid fuel chemical and hydrogen.

SECURITY

JIMEX 20

The 4th edition of **India - Japan Maritime bilateral exercise JIMEX**, which is conducted biennially between the Indian Navy and Japanese Maritime Self-Defense Force (JMSDF) was held recently.

Background -
JIMEX series of exercises commenced in January 2012 with special focus on maritime security cooperation. The last edition of JIMEX was conducted in October 2018 off Visakhapatnam, India.

Objective -
- JIMEX 20 showcases high degree of inter-operability and joint operational skills through conduct of a multitude of advanced exercises, across the spectrum of maritime operations.
- Multi-faceted tactical exercises involving weapon firings, cross deck helicopter operations and complex surface, anti-submarine and air warfare drills will consolidate coordination developed by the two navies.
- JIMEX 20 will further enhance the cooperation and mutual confidence between the two navies and fortify the long standing bond of friendship between the two countries.

Defence Acquisition Procedure-2020

Raksha Mantri Shri Rajnath Singh has unveiled the 'Defence Acquisition Procedure (DAP) - 2020'.

Background -
- The **first Defence Procurement Procedure (DPP)** was **promulgated in the year 2002** and has since been revised periodically to provide impetus to the growing domestic industry and achieve enhanced self reliance in defence manufacturing.
- Raksha Mantri had approved constitution of Main Review Committee under Chairmanship of DG (Acquisition) **Shri Apurva Chandra** in August 2019 for preparation of DAP-2020.
- DAP 2020 will be applicable with effect from 01 October 2020.

Salient features of DAP-2020 -

With the new Foreign Direct Investment policy announced, DAP 2020 has adequately included provisions to encourage FDI to establish manufacturing hubs both for import substitution and exports while protecting interests of Indian domestic industry. Specific reforms enunciated in Atmanirbhar Bharat Abhiyan, have been incorporated as under -

- **Notify a List of Weapons/Platforms for Ban on Import -** Relevant incorporation has been done in the DAP to ensure that NO equipment is procured ex import post timelines notified.
- **Indigenisation of Imported Spares**.
- **Request For Information -** RFI stage will explore willingness of the prospective foreign vendors to progressively undertake manufacture and setup an indigenous eco system at the spares/sub component level.
- **New Category of Buy (Global – Manufacture in India) -** The new category incorporates 'manufacture of either the entire/part of the equipment or spares/assemblies/sub-assemblies/ Maintenance, Repair and Overhaul (MRO) facility for the equipment, through its subsidiary in India.
- **Co-production through Inter-Governmental Agreement (IGA) -** This enables establishment of co-production facilities through IGA achieving 'Import Substitution' and reduce Life Cycle Cost.
- **Contractual Enablement -** Buyer's Right to optimise Life Cycle Support costs and system enhancements through indigenous eco system incorporated.
- **FDI in Defence Manufacturing -** With the announcement of new FDI Policy, suitable provisions have been incorporated like new category 'Buy (Global – Manufacture in India)' done to encourage foreign OEMs to setup 'manufacturing/maintenance entities' through its subsidiary in India while enabling requisite protections to domestic industry.
- **Time Bound Defence Procurement Process and Faster Decision Making -** As part of the Defence Reforms announced in the Atmanirbhar Abhiyan, setting up of a PMU has been mandated to support contract management. The PMU will facilitate obtaining advisory and consultancy support in specified areas to streamline Acquisition process. Other issues included in these reforms are:-
- **Simplification of Trial Procedures -** DAP 2020 emphasises the need to conduct trials with an objective to nurture competition based on the principles of transparency, fairness and equal opportunities to all and not as a process of elimination.
- **Ease of Doing Business -** One of the key focus areas of the review was to implement 'Ease of Doing Business' with emphasis on simplification, delegation and making the process industry friendly with certain specific provisions.
- **Reservation in Categories for Indian Vendors -** The categories of Buy(Indian-IDDM), Make I, Make II, Production Agency in Design &Development, OFB/DPSU and SP model will be exclusively reserved for Indian Vendors meeting the criteria of Ownership and Control by resident Indian Citizens with FDI not more than 49%. This reservation will provide exclusivity in participation to domestic Indian industry.
- **Enhancement of Indigenous Content**
- **Offsets -** The Offset guidelines have been revised, wherein preference will be given to manufacture of complete defence products over components and various multipliers have been added to give incentivisation in discharge of Offsets.

Amendment to FCRA

The Foreign Contribution (Regulation) Amendment Bill, 2020, was introduced in the Lok Sabha recently.

What does it intend to do?
The Centre is set to amend the **Foreign Contribution (Regulation) Act** and **proposes to make Aadhaar a mandatory identification document for all the office-bearers, directors and other key functionaries of an NGO or an association** eligible to receive foreign donations.

Why?
The Bill says the amendment is required **to enhance transparency and accountability** in the receipt and utilisation of foreign contributions worth thousands of crores of rupees every year and

facilitating the "**genuine**" **non-governmental organisations or associations** who are working for the welfare of society.

Provisions of amendment -
• The Bill proposes to include "**public servant**" and "**corporation owned or controlled by the government**" among the list of entities who are **not eligible to receive foreign donations**, the draft says.
• Amendment of clause (c) of sub-section (1) of section 3 to **include public servant also within its ambit**, to provide that no foreign contribution shall be accepted by any public servant.
• The Bill proposes that **not more than 20% of the total foreign funds received could be defrayed for administrative expenses**. At present the limit is 50%.

About FCRA -
• Government of India enacted the Foreign Contribution (Regulation) Act (FCRA) in the year 1976 with an objective of regulating the acceptance and utilisation of foreign contribution.
• The legislation aims to **regulate the acceptance and utilisation of foreign contribution or foreign hospitality** by certain individuals or associations or companies.
• It aims to prohibit funding for any activities detrimental to the national interest and for matters connected therewith.
• The act was majorly modified in 2010 with several amendments because many NGOs were found using illegal use of foreign funding.

Recent changes in FCRA -
• Earlier, as per the FCRA 2010, only applicants such as directors who sought permission to receive foreign funds were required to make such a declaration. Now, every member of an NGO must, under oath, through an affidavit, declare that they have never been involved in diverting foreign funds or "**sedition**" or "**advocating violent means**".
• It has been made mandatory for office bearers and key functionaries and members to certify that they have not been "**prosecuted or convicted**" for "**conversion**" from one faith to another and for creating "communal tension and disharmony".

Who are debarred from receiving foreign contribution?
• Candidate contesting an election
• Cartoonist, editor, publishers of registered newspaper
• Judge
• Government servants or employee of any corporation
• Member of any legislature
• Public servants (proposed in the new amendment)