

UPSCGATEWAYY

PIB COMPILATION

MARCH 2019

1. INDIAN POLITY

- New Delhi International Arbitration Centre, 2019
- ➤ Registration of political parties under Section 29A of the RP Act, 1951

2. GOVERNANCE

- FAME India Phase II
- Pradhan Mantri Jl-VAN Yojana
- National Mineral Policy, 2019
- Promulgation of Aadhaar and Other Laws (Amendment) Ordinance, 2019
- National Policy on Software Products 2019
- Program for non-communicable diseases
- ➤ The Integrated Child Development Service
- Pradhan Mantri Shram Yogi Maan-Dhan Yojana
- ► BM- Grameen confirms over 96% usage of toilets
- NABL launches Quality Assurance Scheme for Basic Composite Medical Laboratories
- Atal Innovation Mission
- Women get a special focus under Skill India Mission
- UDAN Scheme: Revival of un-served and under-served air strips
- National Crime Records Bureau (NCRB)
- Govt modifies Solar Park Scheme
- National guidelines on responsible business conduct
- Festival of Innovation and Entrepreneurship 2019
- Cabinet approves accession to three new agreements for IPR
- India Energy Modelling Forum
- ➤ Global Environmental Outlook Report 2019
- ECI launches Observer App
- Multi-Departmental Committee on Election Intelligence

- Preparedness on West Nile Fever
- National Anti-profiteering Authority (NAA)
- ► MDWS marks World Water Day with water management workshop
- Report on Sample Size of VVPAT Counting
- Swachh Survekshan 2019
- ➤ FinTech Conclave 2019
- ➤ Allotment of Broadcast/Telecast time to Recognized National/State Political Parties
- Drugs and Clinical Trials Rules, 2019
- Global Multidimensional Poverty Index (MPI) 2018
- **Biomedical Research Career Programme**
- Cabinet approves additional posts in NCLAT
- Ujwal Bharat
- DigiLocker

3. SCIENCE & TECHNOLOGY

- ➤ ISRO, French agency to set up maritime surveillance system
- Yuva Vigyani Karyakram Programme Launched by ISRO
- > STI council leverages science & tech through 9 missions
- Single-layer graphene
- West Nile Virus (WNV)
- ISO 9001 : 2015
- ➤ IT Kharagpur signs an MoU with C-DAC
- Waterless chrome tanning technology
- **▶ GRAPES-3** Experiment
- Young Scientist Programme (YUVIKA)
- > PSLV-C45 / Emisat Mission
- ► Humans can detect the earth's magnetic fields
- Bio-Digester technology

4. INDIAN SOCIETY

- India Urban Observatory & Video Wall
- Pandit Deendayal Upadhyaya Institute of Archaeology

5. GEOGRAPHY/ENVIRONMENT

► The New Delhi Declaration on Asian Rhinos 2019

- Red Sanders is now free of export restrictions
- Flood Management and Border Areas Programme (FMBAP)
- India Cooling Action Plan (ICAP)
- Protecting the Sundarban wetlands
- India's biodiversity-rich zones also 'hotspots' of human impacts
- Climate vulnerability index
- The Global Chemicals Outlook II
- International Workshop on Disaster Resilient Infrastructure
- India pilots resolutions on Single-use Plastics and Sustainable Nitrogen management
- Indo-Japan Workshop on Disaster Risk Reduction
- NGT Directs CPCB to Prepare Noise Pollution Maps
- ➤ India's first forest-certification scheme gets global recognition
- IEA CO2 Emission Status Report
- ➤ Island Protection Zone (IPZ) 2019
- Hump-backed Mahseer

6. INDIAN ECONOMY

- Construction Technology India-2019 Expo-Cum-Conference
- Assam to be oil exporting hub
- IRCTC Launches Payment Aggregator IRCTC iPay
- National Common Mobility Card
- Society for Worldwide Interbank Financial Telecommunications
- Transport and Marketing Assistance (TMA)
- New measures to promote Hydro Power Sector
- Kiru Hydro Electric (HE) Project
- National Mission on Transformative Mobility and Battery Storage
- Idukki's Marayoor Jaggery gets GI tag
- White Label ATM
- ➤ CII-EXIM Bank Conclave on India-Africa Project Partnerships
- India launches third IT corridor in China
- Consumer Price Index Numbers
- Standards & Labelling (Star Rating) program
- ➤ RBI categorises IDBI as a private bank
- UNNATEE (UNlocking NATional Energy Efficiency Potential)

- Exchange Traded Fund (ETF)
- Financial Stability and Development Council (FSDC)
- IBBI, SEBI sign MoU for better implementation of IBC
- RBI's Expert Committee on MSME
- International Air Transport Association (IATA)
- Voluntary Retention Route (VRR) Scheme of RBI
- Disinvestment Exceeds Target
- Energy Transition index 2019
- Trade Receivables e-Discounting System (TReDS)
- ➤ The regulatory sandbox/innovation hub
- ► GI Certification for five varieties of Indian coffee

7. INTERNATIONAL RELATIONS & INT SECURITY

- India joining IEA Bioenergy TCP
- Bilateral Swap Arrangement Signed Between RBI and Bank of Japan
- India, Russia to ink nuclear submarine deal
- Mainamati Maitree Exercise 2019 concluded between Indian BSF and BGB
- ➤ Indo-Pacific Regional Dialogue 2019
- BOLD-QIT project
- Generalized System of Preferences (GSP) programme
- AK-203 Rifle Manufacturing Unit
- Pinaka Guided Weapons System
- DRDO Develops a Range of Combat Casualty Drugs
- National Knowledge Network
- ➤ INDO-OMAN Joint Ex Al Nagah 2019
- India gets first TIR shipment via Chabahar Port from Afghanistan
- WHO strategy to fight flu pandemics
- Fourth Session of the UN Environment Assembly
- > TROPEX 19
- > AFINDEX-19
- India-Indonesia Coordinated Patrol (Ind-Indo Corpat)
- ► India, US to sign pact for exchange of country-by-country reports
- ➤ US will Recognize Israel's Sovereignty Over Golan Heights
- World Tuberculosis Day

- > ABHEDYA -Nuclear, Biological, Chemical Training Facility
- ➤ CH47 Chinook heavy-lift Choppers
- Exercise AUSINDEX
- World Food Programme
- Langkawi International Maritime and Aerospace Exhibition (LIMA)
- > Sharda Peeth Corridor
- ➤ MoU on combating illicit trafficking in narcotic drugs
- MoU on Antarctic cooperation between India and Argentina
- Terror Monitoring Group (TMG)
- Dhanush Howitzers Artillery Guns
- Base Erosion and Profit Shifting (BEPS)
- **▶** India Bolivia Relations



INDIAN POLITY

NEW DELHI INTERNATIONAL ARBITRATION CENTRE, 2019

GS 1: Polity

Prelims Level: New Delhi International Arbitration Centre, 2019

Why in News?

 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.

Objectives:

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

Constitution of NDIAC:

- 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.

Benefits:

- 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.

REGISTRATION OF POLITICAL PARTIES UNDER SECTION 29A OF THE RP ACT, 1951

GS 2: Polity | Salient features of the Representation of People's Act.

Prelims level: Rules for registering a Political Party

Why in News?

• The Election Commission has announced the elections for the Lok Sabha and Assemblies to Andhra Pradesh, Orissa, Arunachal Pradesh.

Highlights:

- In view of the current elections, the Commission has given one time relaxation and has reduced the notice period from 30 days to 7 days for the parties who have published their public notice by 10th March, 2019 i.e. date of announcement of election.
- Now, therefore, if anybody has any objection with regard to the registration of any
 political party who have published their public notice by 10th march, 2019 may file their
 objection against that party by 17th March, 2019.

Procedure for registration:

- Registration of Political parties is governed by the provisions of Section 29A of the Representation of the People Act, 1951.
- A party seeking registration under the said Section with the Commission has to submit an
 application to the Commission within a period of 30 days following the date of its
 formation as per guidelines prescribed by the Election Commission of India in exercise of
 the powers conferred by Article 324 of the Commission of India and Section 29A of the
 Representation of the People Act, 1951.

• As per existing guidelines, the applicant association is inter-alia asked to publish proposed Name of the party in two national daily newspapers and two local daily newspapers, on two days in same newspapers, for inviting objections, if any, with regard to the proposed registration of the party before the Commission within a 30 days from such publication.

Eligibility of National Political Party:

- However, to be eligible for a 'National Political Party of India,' the Election Commission
 has set the following criteria
 - ✓ It secures at least six percent of the valid votes polled in any four or more states, at a general election to the House of the People or, to the State Legislative Assembly; and
 - ✓ In addition, it wins at least four seats in the House of the People from any State or States. OR
 - ✓ It wins at least two percent seats in the House of the People (i.e., 11 seats in the existing House having 543 members), and these members are elected from at least three different States.

Eligibility of State Political Party:

- To be eligible for a 'State Political Party,' the Election Commission has set the following criteria –
 - ✓ It secures at least six percent of the valid votes polled in the State at a general election, either to the House of the People or to the Legislative Assembly of the State concerned; and In addition, it wins at least two seats in the Legislative Assembly of the State concerned. OR It wins at least three percent (3%) of the total number of seats in the Legislative Assembly of the State, or at least three seats in the Assembly, whichever is more.

GOVERNANCE

FAME INDIA PHASE II

GS 2: Governance | Government policies and interventions for development in various sectors

Why in News?

• The Union cabinet chaired 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.

 This scheme is the expanded version of the present scheme titled 'FAME India1 which was launched on 1st April 2015

Highlights:

- 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.

Impact:

 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.

PRADHAN MANTRI JL-VAN YOJANA

GS 2: Governance | Government policies and interventions for development in various sectors

Why in News?

• The Cabinet Committee on Economic Affairs, chaired by Hon'ble Prime Minister Shri Narendra Modi has approved the "Pradhan Mantri JI-VAN (Jaiv Indhan- Vatavaran AnukoolFasal Awashesh Nivaran) Yojana" for providing financial support to Integrated Bioethanol Projects using lignocellulosic biomass and other renewable feedstock.

Scheme Highlights:

- 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:
- Phase-I (2018-19 to 2022-23): wherein six commercial projects and five demonstration projects will be supported.
- Phase-II (2020-21to2023-24): 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.

Significance:

- Meeting Government of India vision of reducing import dependence by way of substituting fossil fuels with Biofuels
- Achieving the GHG emissions reduction targets through progressive blending/ substitution of fossil fuels Addressing environment concerns caused due to burning of biomass/ crop residues & improve health of citizens
- Improving farmer income by providing them remunerative income for their otherwise
 waste agriculture residues Creating rural & urban employment opportunities in 2G
 Ethanol projects and Biomass supply chain. Contributing to Swacch Bharat Mission by
 supporting the aggregation of non-food biofuel feedstocks such as waste biomass and
 urban waste
- Indigenizing of Second-Generation Biomass to Ethanol technologies
- 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. 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 feedstock like celluloses and lignocelluloses material including petrochemical route.

NATIONAL MINERAL POLICY, 2019

GS 2: Governance | Government policies and interventions for development in various sectors

Why in News?

• The Union Cabinet, chaired by the Prime Minister has approved National Mineral Policy 2019.

Benefits:

 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

Objective:

 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.

Importance of new policy:

- National Mineral Policy, 2019 include the focus on make in India initiative and Gender sensitivity in terms of the vision. In so far as the regulation in Minerals is concerned, E-Governance, IT enabled systems, awareness and Information campaigns have been incorporated. Regarding the role of state in mineral development online public portal with provision for generating triggers at higher level in the event of delay of clearances has been put in place.
- NMP 2019 aims to attract private investment through incentives while the efforts would be made to maintain a database of mineral resources and tenements undermining tenement systems. The new policy focusses on use coastal waterways and inland shipping for evacuation and transportation of minerals and encourages dedicated mineral corridors to facilitate the transportation of minerals. The utilization of the district mineral fund for equitable development of project affected persons and areas.

- NMP 2019 proposes a long term export-import policy for the mineral sector to provide stability and as an incentive for investing in large scale commercial mining activity.
- 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.

PROMULGATION OF AADHAAR AND OTHER LAWS (AMENDMENT) ORDINANCE, 2019

GS 2: Governance | Government policies and interventions for development in various sectors

Why in News?

 The Union Cabinet chaired has approved the promulgation of an Ordinance to make amendments to the Aadhaar Act 2016, Prevention of Money Laundering Act 2005 & Indian Telegraph Act 1885. The amendments proposed are the same as those contained in the Bill passed by the Lok Sabha.

Impact:

- The amendments would enable UIDAI to have a more robust mechanism to serve the public interest and restrain the misuse of Aadhaar.
- Subsequent to this amendment, no individual shall be compelled to provide proof of possession of Aadhaar number of undergo authentication for the purpose of establishing his identity unless it is so provided by a law made by Parliament.

Salient Features:

- The salient features of the amendments are as follows —
- Provides for voluntary use of Aadhaar number in physical or electronic form by authentication or offline verification with the consent of Aadhaar number holder;
- Provides for use of twelve-digit Aadhaar number and its alternative virtual identity to
 conceal the actual Aadhaar number of an individual; Gives an option to children who are
 Aadhaar number holders to cancel their Aadhaar number on attaining the age of eighteen
 years; Permits the entities to perform authentication only when they are compliant with

- the standards of privacy and security specified by the Authority; and the authentication is permitted under any law made by Parliament or is prescribed to be in the interest of State by the Central Government;
- Allows the use of Aadhaar number for authentication on voluntary basis as acceptable KYC document under the Telegraph Act, 1885 and the Prevention of Money-laundering Act, 2002. Proposes deletion of section 57 of the Aadhaar Act relating to use of Aadhaar by private entities; Prevents denial of services for refusing to, or being unable to, undergo authentication; Provides for establishment of Unique Identification Authority of India Fund; Provides for civil penalties, its adjudication, appeal thereof in regard to violations of Aadhaar Act and provisions by entities in the Aadhaar ecosystem.

Background:

- The Supreme Court in its judgement in September. 2018 held Aadhaar to be constitutionally valid. However, it read down/struck down few sections of the Aadhaar Act and Regulations and gave several other directions in the interest of protecting the fundamental rights to privacy. Consequently it was proposed to amend the Aadhaar Act, Indian Telegraph Act and the Prevention of Money Laundering Act in line with the Supreme Court directives and the report of Justice B.N.Srikrishna (Retd.) committee on data protection, in order to ensure that personal data of Aadhaar holder remains protected against any misuse and Aadhaar scheme remains in conformity with the Constitution.
- Towards this, the Aadhaar and Other Laws (Amendment) Bill, 2018 was passed by the Lok Sabha. However, before the same could be considered and passed in the Rajya Sabha, the Rajya Sabha was adjourned sine die.

NATIONAL POLICY ON SOFTWARE PRODUCTS - 2019

GS 2: Governance | Government policies and interventions for development in various sectors

Why in News?

 The Union Cabinet has approved the National Policy on Software Products – 2019 to develop India as a Software Product Nation.

Highlights:

• To promote the creation of a sustainable Indian software product industry, driven by intellectual property (IP), leading to a ten-fold increase in India share of the Global Software product market by 2025. To nurture 10,000 technology startups in software

product industry, including 1000 such technology startups in Tier-II and Tier-III towns & cities and generating direct and in-direct employment for 3.5 million people by 2025.

- To create a talent pool for software product industry through
- up-skilling of 1,000,000 IT professionals,
- motivating 100,000 school and college students and
- generating 10,000 specialized professionals that can provide leadership.
- To build a cluster-based innovation driven ecosystem by developing 20 sectoral and strategically located software product development clusters having integrated ICT infrastructure, marketing, incubation, R&D/testbeds and mentoring support.
- In order to evolve and monitor scheme & programmes for the implementation of this
 policy, National Software Products Mission will be set up with participation from
 Government, Academia and Industry.

Major impact:

• The Software product ecosystem is characterized by innovations, Intellectual Property (IP) creation and large value addition increase in productivity, which has the potential to significantly boost revenues and exports in the sector.

Implementation strategy and targets:

 The Policy will lead to the formulation of several schemes, initiatives, projects and measures for the development of Software products sector in the country as per the roadmap envisaged therein.

PROGRAM FOR NON-COMMUNICABLE DISEASES

GS 2: Governance | Government policies and interventions for development in various sectors

Why in News?

 The Cabinet Committee on Economic Affairs, chaired by the Prime Minister Shri Narendra Modi, has given its approval for continuation of implementation of the following Tertiary healthcare programmes for non-communicable diseases and E-Health upto 2020.

Objectives:

Objective of the umbrella program of tertiary healthcare is to provide support for creation
of tertiary care health facilities in the areas of cancer diagnosis & treatment, care for the
elderly, trauma and burn injuries, drug dependence, mental health and blindness & visual
impairment. It also aims at digitisation of health sector.

- ✓ Strengthening of Tertiary Care Cancer facilities Scheme
- ✓ National Program for Health Care of the Elderly
- ✓ National Program for Prevention & Management of Trauma and Burn Injuries
- ✓ National Program for Tobacco Control and Drug Addiction Treatment
- ✓ National Mental Health Program
- ✓ National Program for Control of Blindness and Visual Impairment
- ✓ Program for Strengthening of e-Health and Telemedicine Services

Impact:

- The focus under these Programs is: -
 - ✓ to create required infrastructure at tertiary level for these Programs,
 - ✓ creation of Centre of Excellences which shall serve as Institutes to set standards and undertake research in these fields besides
 - ✓ To help in creation of trained manpower in these Programs for the country.

Benefits:

• Under these programmes, Tertiary care treatment will be further strengthened to meet the ever-increasing patient load.

Employment Generation:

 The Programs are aimed at strengthening of tertiary level healthcare facilities for treatment through capacity building in terms of both infrastructure and human resources.
 There would be considerable direct and indirect employment generation both for technical and non-technical professionals in the country.

THE INTEGRATED CHILD DEVELOPMENT SERVICE

GS 2: Governance | Government policies and interventions for development in various sectors

Why in News?

• The Integrated Child Development Service (ICDS) scheme, launched in 1975 to tackle under-nutrition, offers nutrition and health services across the continuum of care in the first 1,000 days of a child's life. It was made universal in 2006.

Objectives:

- To provide food and primary healthcare to children under six as well as pregnant women and lactating mothers.
- It also provides pre-school education.

ICDS assessment:

- Health insurance coverage jumped to 24.3 per cent from 3.7 percent.
- Illiteracy among mothers fell to 27 per cent from 46.3 per cent.
- The receipt of supplementary food by mother-child pairs increased to 37.9 per cent from 9.6 per cent. Use of health check-ups increased by 23.5 percentage points
- Health and nutrition education rose 17.9 percentage points. Children receiving supplementary food monthly went up to 27.6 per cent from 19.1 per cent.

Challenges:

- The programme hasn't benefited all social groups equally.
- Improvements among lower-income groups —traditionally at a disadvantage were relatively lower than higher-income groups.
- Lower utilisation and lower expansion of the scheme.
- The exclusion of the potential beneficiaries.

PRADHAN MANTRI SHRAM YOGI MAAN-DHAN YOJANA

GS 2: Governance | Government policies and interventions for development in various sectors

Prelims level: Pradhan Mantri Shram Yogi Maan-Dhan Yojana

Why in News?

 The central govt. of India has introduced the new pension scheme i.e. Pradhan Mantra Shram Yogi Mandhan (PMSYM) for Labour/ Worker in Unorganised Sector. This pension scheme is announced by Union Finance Minster Piyush Goyal in this Interim Budget 2019-20.

Features of Pradhan Mantra Shram Yogi Mandhan (PMSYM) scheme:

- The scheme is for informal sector or unorganised sector workers.
- Subscribers to the scheme are assured of a monthly pension of Rs. 3000 per month after they reach 60 years age.
- The subscribers have to pay a monthly amount of Rs. 100 if the subscriber joins at age 29 and Rs. 55 if the subscriber joins the scheme at 18.
- The same amount will be matched by the government. The scheme is eligible for persons aged between 18 and 40 and are earning Rs. 15000 are less per month. The scheme is estimated to benefit 10 Crore workers from informal sector.
- The government has allocated an initial fund of Rs. 500 crore for the scheme.

Unorganised Sector:

- The unorganized sector in the country constitutes unincorporated entities having less than 10 workers and is owned by individuals or households.
- The sector also includes people working independently in non-formal work which needs minimal skills.
- The sector contributes over 50% to the Indian GDP.

Significance of the scheme:

- It is estimated that over 42 corer workers in India are working in the informal sector.
- As per the India Labour Market Update of 2016, 82% of the Indian workforce is in unorganised sector. The workers of the sector include street vendors, rag pickers, porters, beedi workers, rickshaw pullers, agricultural labourers etc.
- The nature of their job and the income they receive are not stable. Often due to non-availability of any laws to protect their interest, they are subjected to violation by the employers. These uncertain earnings puts pressure on them financially and need some kind of monetary protection to lead a life with means after their productive years.
- It is why social security schemes such as Pradhan Mantri Shram Yogi Mandhan (PMSYM) become necessary where the government is contributing in the premium amount.

BM- GRAMEEN CONFIRMS OVER 96% USAGE OF TOILETS

GS 2: Governance | Government policies and interventions for development in various sectors

Prelims level: BM - Garmeen

Why in News?

 The National Annual Rural Sanitation Survey (NARSS) 2018-19 was conducted by an Independent Verification Agency under the World Bank support project to the Swachh Bharat Mission Grameen (SBM-G).

Key findings of NARSS 2018-19:

- 1% of households were found to have access to toilets during the survey period (the corresponding figure as per the SBMG MIS in November 2018 was 96%)
- 5% of the people who had access to toilets used them
- 7% of villages which were previously declared and verified as ODF were confirmed to be ODF. The remaining villages also had sanitation coverage of about 93%
- 4% of the villages surveyed found to have minimal litter and minimal stagnant water

- The survey used the PPS (Probability Proportion to Size) sampling methodology, which yields results within a confidence interval of 95%.
- Data was collected using the Computer Assisted Personal Interviewing (CAPI) platform.
- The survey also covered schools, anganwadis and public/community toilets in these villages.

Success of SBM-G:

- Since its launch in October 2014, the SBM, the world's largest sanitation program, has changed the behaviour of hundreds of millions of people with respect to toilet access and usage. 500 million people have stopped defecating in the open since the SBM began, down from 550 million at the beginning of the programme to less than 50 million today.
- Over 9 crore toilets have been built across rural India under the Mission.
- Over 5.5 lakh villages and 615 districts have been declared ODF, along with 30 ODF States and Union Territories.

NABL LAUNCHES QUALITY ASSURANCE SCHEME FOR BASIC COMPOSITE MEDICAL LABORATORIES

GS 2: Governance | Issues relating to development & management of Social Sector/Services relating to Health, Education, Human Resources

Prelims level: QAS, NABL

Why in News?

 NABL has launched a voluntary scheme called Quality Assurance Scheme (QAS) for Basic Composite (BC) Medical Laboratories.

Quality Assurance Scheme:

• The laboratories performing only basic routine tests like blood glucose, blood counts, and rapid tests for common infections, liver & kidney function tests and routine tests of urine will be eligible to apply under this scheme. These changes have been made in the Clinical Establishments (Central Government) Rules, 2012. The scheme requires minimal documentation and a nominal fee has been prescribed for availing the scheme.

Objectives:

• The scheme will help to bring quality at the grass root level of India's health system where laboratories follow the imperatives of quality in all their processes. Through this scheme, patients availing services of small labs in primary health centers, community health centers, doctor's clinic etc. will also have access to quality lab results.

17 | Page

- This scheme will enhance the intent of AB-NHPM of universal access to quality healthcare
 for majority of citizens especially those residing in villages and small towns by providing
 them access to quality diagnostics.
- This will ensure end-to-end sample integrity leading to reliable test results and help laboratories to gain patient's trust and satisfaction.

NABL:

• National Accreditation Board for Testing and Calibration Laboratories (NABL) is a constituent board of Quality Council of India (QCI) under the Ministry of Commerce and Industry. NABL is Mutual Recognition Arrangement (MRA) signatory to International bodies like International Laboratory Accreditation Co-operation (ILAC) and Asia Pacific Accreditation Co-operation (APAC) for accreditation of Testing including Medical and Calibration laboratories. MRA are based on evaluation by peer Accreditation Bodies and facilitates acceptance of test/ calibration results between countries which MRA partners represent. Thus NABL accredited laboratory results are accepted across more than 80 economies around the world.

ATAL INNOVATION MISSION

GS 2: Governance | Government policies & interventions for development

Prelims level: AIM

Why in News?

• The Union Cabinet has approved Continuation of Atal Innovation Mission (AIM) till 2019-20.

Atal Innovation Mission (AIM):

- It includes Self-Employment and Talent Utilization (SETU) is Government of India's endeavour to promote a culture of innovation and entrepreneurship.
- AlM's objectives are to create and promote an ecosystem of innovation and entrepreneurship across the country at school, university, research institutions, MSME and industry levels. The Mission has been set up under NITI Aayog.

Highlights:

- AIM has multiple programs to encourage and support innovation in the country.
- State of the art Atal Tinkering Labs (ATLs) are being established in thousands of schools,
 world class Atal Incubation Centres (AIC) and Atal Community Innovation Centers
 (ACIC) are being established for universities and industry

- Promotion of product development in areas of national relevance and social importance is being supported through Atal New India Challenges (ANICs).
- The Mission has undertaken many bold and forward-looking initiatives such as Alal Tinkering Labs (ATL) and Atal Incubation Centres (AIC), which have received great traction; Many Ministries/Departments of Government of India have initiated innovation related activities with the help and technical support of AIM.
- Under the ATL program, more than 10,000 schools are expected to establish these labs by 2020. More than 100 Atal Incubation Centres (AICs) are likely to established around the country, supporting at least 50-60 startups each over the first five years.
- More than 100 innovators/startups are expected to receive some support for productizing their innovations.
- Other programs being supported through Ministries will have even more beneficiaries.
- Each incubator is expected to foster 50-60 technology driven innovative Startups every four years. The 100+ Incubators set up would thus foster 5000-6000 innovative Startups and this will multiply with new incubators being set up.
- The potential for employment generation from these innovations driven Startups is quite high.

WOMEN GET A SPECIAL FOCUS UNDER SKILL INDIA MISSION

GS 2: Governance | Issues relating to development & management of Social Sector/Services Prelims Level: Skill India mission

Why in News?

 The Skill India mission is committed to facilitate this through equipping women with market relevant skills and lead them to a path of self-sufficiency through entrepreneurship.

Objective:

- The National Skill Development and Policy focuses on inclusive skill development with the objective of increased women participation for better economic productivity.
 - ✓ Emphasis has been laid on creating additional infrastructure both for training and apprenticeship for women
 - ✓ flexible training delivery mechanisms such mobile training units
 - ✓ flexible afternoon batches along with on local need-based training to accommodate women

- ✓ ensuring safe and gender sensitive training environment
- ✓ employment of women trainers
- ✓ equity in remuneration, and complaint redressal mechanism

The initiatives:

- ✓ Long Term Skill Development Training via Industrial Training Institutes (ITIs)
- ✓ Short Term Skill Development Training
- ✓ Recognition of Prior Learning (RPL)
- ✓ Apprenticeship Training
- ✓ Policy Interventions-The National Skill Development Policy focuses on inclusive skill development, with the objective of increased women participation for better economic productivity.
- ✓ Special Women-Centric Projects
- ✓ Partnerships with Private & Non-Government Organizations to boost skill development
- ✓ Projects in Pradhan Mantri Mahila Kaushal Kendra (PMMKK)
- ✓ Future jobs and industry-oriented courses
- ✓ Entrepreneurial Initiatives

NATIONAL CRIME RECORDS BUREAU (NCRB)

GS 2: Governance

Prelims Level: NCRB, CCTNS

Why in News?

 National Crime Records Bureau (NCRB) will celebrate its 34th Inception Day on March 11, 2019.

NCRB:

- Formed in 1986, based on the recommendations of the National Police Commission (19771981) and the MHA's Task force (1985). NCRB is mandated to empower the Indian Police
 with Information Technology and is responsible for collecting, maintaining and analysing
 the crime data of the country. It facilitates Investigating Officers with updated IT tools and
 information in Investigation of Crimes.
- NCRB is the Nodal Agency for authentic source of data on crime, accidents, suicides, and
 prisons for policy matters and research. Bureau is also apex nodal agency for all Finger
 Print related matters including accreditation of Finger Print Experts in the country.

- Bureau is implementing & monitoring agency for implementation of Crime & Criminal Tracking Network System (CCTNS), a Mission Mode Project under the National e-Governance Plan of Government of India.
- The project aims at creating a comprehensive and integrated system for enhancing the efficiency and effectiveness of policing in the country.

Objectives of NCRB:

- Create and maintain secure sharable National Databases on crimes and criminals for law enforcement agencies and promote their use for public service delivery
- Collect and process crime statistics at the national level and create clearing house of information on crime and criminals both at National and International levels
- Lead and coordinate development of IT applications and create an enabling IT environment for Police organizations. National repository of fingerprints of all criminals.
- To evaluate, modernize and Promote automation in State Crime Records Bureaux and State Finger Print Bureaux. Training and capacity building in Police Forces in Information Technology and Finger Print Science.

Crime and Criminal Tracking Network and Systems (CCTNS):

Crime and Criminal Information System (CCIS) was implemented at district level during
the period 1995-2004. Common Integrated Police Application (CIPA) was implemented at
police station level during the period 2004-2009 in three phases. Crime and Criminal
Tracking Network & Systems (CCTNS) is approved by Cabinet Committee on Economic
Affairs (CCEA) on 19.06.2009.

Objectives:

- Creating State and Central levels databases on crime and criminals
- Enable easy sharing of real-time information/ intelligence across police stations, districts and States. Improved investigation and crime prevention.
- Improved service delivery to the public/ stakeholders through Citizen Portals

Interoperable Criminal Justice System (ICJS):

• ICJS has been mandated for integrating CCTNS, Police with e-Courts, eprisons, Forensics, Finger Print Bureaux and Prosecution, which are the key components of the Criminal Justice System. Implementation of ICJS will ensure quick data transfer among different pillars of criminal justice system. ICJS is monitored by a committee chaired by Hon'ble Justice Madan B. Lokur of Supreme Court of India.

 ICJS data exchange matrix between different pillars of criminal justice system has been finalized & coordinated by NCRB. NCRB has also prepared a report on connectivity for all pillars.

GOVT. MODIFIES SOLAR PARK SCHEME

GS 2: Governance | Government policies & interventions for development

Prelims Level: Solar park scheme

Mains Level: Initiatives for development of renewable energy sources

Why in News?

 The government has modified the existing scheme for development of solar parks and ultra-mega solar parks in a bid to ease constraints related to availability of land and evacuation infrastructure.

The New guidelines-Mode-7:

- A new mode is being introduced for development of renewable energy parks (solar/wind/hybrid/other RE parks) through Solar Energy Corporation of India(SECI).
- SECI will make both government and private land available for successful bidders for setting up projects with the assistance of state government.
- The state government would be paid a facilitation charge of Rs 0.02 per unit of power being generated in these parks. No fund from Central Financial Assistance (CFA) would be used for the procurement of land. SECI would act as a Solar Power Park Developer (SPPD) and will get the external power evacuation infrastructure of the parks developed by the External Transmission Development Agency such as transmission utilities.
- SECI would also set up a Payment Security Mechanism to make setting up of renewable projects in such parks more attractive.

Solar Park scheme:

- Ministry of New and renewable Energy (MNRE) has drawn a scheme to set up number of solar parks across various states in the country.
- The Scheme proposes to provide financial support by Government of India to establish solar parks. The scheme aim to facilitate creation of infrastructure necessary for setting up new solar power projects in terms of allocation of land, transmission and evacuation lines, access roads, availability of water and others, in a focused manner. The implementation agency would be Solar Energy Corporation of India (SECI) on behalf of Government of India (GOI).

- The Solar Park is a concentrated zone of development of solar power generation projects
- The parks will be characterized by well-developed proper infra-structure where the risk &
 gestation period of the projects will be minimized. At the state level, the solar park will
 enable the states to bring in significant investment from project developers in Solar Power
 sector, to meet its Solar Purchase Obligation (SPO) mandates and provide employment
 opportunities to local population.
- The state will also be able to reduce its carbon footprint by avoiding emissions equivalent to the solar park's generated capacity.

NATIONAL GUIDELINES ON RESPONSIBLE BUSINESS CONDUCT

GS 2: Governance | Government policies and interventions for development in various sectors

Mains Level: National Voluntary Guidelines, NGRBC

Why in News?

 Ministry of Corporate Affairs has revised the National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business, 2011 (NVGs) and formulated the National Guidelines on Responsible Business Conduct (NGRBC).

Revised NVG guidelines:

• The NVGs 2011 were developed based on India's socio-cultural context and priorities as well as global best practices. There have been various national and international developments in the past decade that have nudged businesses to be sustainable and more responsible, prior most being the United Nations Guiding Principles on Business & Human Rights (UNGPs). The thrust of Companies Act, 2013 (Act) on businesses to be more mindful of their stakeholders. And to demonstrate more visibly India's implementation of the UNGPs based on UNHRC's 'Protect, Respect & Remedy' Framework and also make evident India's commitment to Sustainable Development Goals (SDGs). The Ministry of Corporate Affairs is also in the process of developing India's National Action Plan on Business & Human Rights (NAP) in consultation with various Ministries and State Governments by 2020.

NGBRC principles:

 Businesses should conduct and govern themselves with integrity in a manner that is Ethical, Transparent and Accountable. Businesses should provide goods and services in a manner that is sustainable and safe

- Businesses should respect and promote the well-being of all employees, including those in their value chains.
- Businesses should respect the interests of and be responsive to all their stakeholders.
- Businesses should respect and promote human rights.
- Businesses should respect and make efforts to protect and restore the environment.
- Businesses, when engaging in influencing public and regulatory policy, should do so in a manner that is responsible and transparent.
- Businesses should promote inclusive growth and equitable development.
- Businesses should engage with and provide value to their consumers in a responsible manner.

FESTIVAL OF INNOVATION AND ENTREPRENEURSHIP 2019

GS 2: Governance | Government policies and interventions for development in various sectors

Prelims Level: FINE Initiative, National Innovation Foundation

Why in News?

• The President of India, visit Gujarat to inaugurate the Festival of Innovation and Entrepreneurship in Gandhinagar.

Festival of Innovation & Entrepreneurship (FINE):

• FINE is an initiative being organised by Rashtrapati Bhavan in association with the Department of Science and Technology, Government of India and the National Innovation Foundation-India. It will recognise, respect, showcase, reward innovations and to foster a supportive ecosystem for innovators. FINE will provide a platform for innovators for building linkages with potential stakeholders to develop their ideas into implementable projects for the larger social good. It will provide a window to showcase creative and innovative solutions for social development through innovation emerging from grassroots, student ideas and other technologies.

National Innovation Foundation (NIF):

• The National Innovation Foundation (NIF) – India, is India's national initiative to strengthen the grassroots technological innovations and outstanding traditional knowledge. Its mission is to help India become a creative and knowledge-based society by expanding policy and institutional space for grassroots technological innovators. It was set up with the support of Honey Bee Network.

- NIF scouts, supports and spawns' grassroots innovations developed by individuals and local communities in any technological field, helping in human survival without any help from formal sector.
- It also tries to ensure that such innovations diffuse widely through commercial and/or non-commercial channels, generating material or non-material incentives for them and others involved in the value chain.

Cabinet approves accession to three new agreements for IPR

GS 2: Governance | Government policies & interventions for development in various sectors & issues arising out of their design & implementation

Prelims level: Nice Agreement, Vienna Agreement, Locarno Agreement

Mains Level: Intellectual Property protection.

Why in News?

- The Union Cabinet, chaired by the Prime Minister has approved the proposal for accession of India to
 - ✓ The Nice Agreement concerning the International classification of Goods and
 Services for the purposes of registration of marks.
 - ✓ The Vienna Agreement establishing an International Classification of the figurative elements of marks, and
 - ✓ The Locarno Agreement establishing an International classification for industrial design.

Significance of these agreements:

- Accession to the Nice, Vienna and Locarno Agreements will help the Intellectual Property
 Office in India to harmonise the classification systems for examination of trademark and
 design applications, in line with the classification systems followed globally.
- It would give an opportunity to include Indian designs, figurative elements and goods in the international classification systems.
- The accession is expected to instil confidence in foreign investors in relation to protection of IPs in India. The accession would also facilitate in exercising rights in decision making processes regarding review and revision of the classifications under the agreement. These are open to States party to the Paris Convention for the Protection of Industrial Property (1883). Instruments of ratification or accession must be deposited with the Director General of WIPO.

INDIA ENERGY MODELLING FORUM

GS 2: Governance | Government policies & interventions for development in various sectors & issues arising out of their design & implementation

Mains Level: India Energy Modelling Forum

Why in News?

• The NITI Aayog and the United States Agency for International Development (USAID) organized the first workshop on development of the India Energy Modelling Forum (IEMF), which has been envisaged as a pan-stakeholder platform for debating ideas, scenario-planning & discussing India's energy future.

Highlights:

- The IEMF seeks to provide a platform for leading experts and policymakers to study important energy and environmental issues and ensure induction of modelling and analysis in informed decision-making process.
- The Forum aims to improve cooperation and coordination between modelling teams, the Government of India, knowledge partners and think-tanks, build capacity of Indian institutions, and identify issues for joint modelling activities and future areas of research.
- The workshop featured expert sessions on following matters:
- Discussions on energy modelling in India and the world explored how energy modelling can play an important role in decision-making.
- The panelists particularly laid focus on bridging the rural-urban divide and factoring in energy pressures from the informal economy within models.
- There was a need expressed to ensure that holistic perspective of energy consumption and ground realities must be inducted to produce practical and feasible energy models, converging land and water use patterns within energy models.
- Deliberations included a spotlight on how the impact of the evolving character of India's cities, industries and especially the transport sector should be included in any Indiacentric models.
- The shift towards electric mobility, an increasing emphasis on mainstreaming of renewable energy options and overarching environmental concerns were also stated as key factors for determining India's energy future.

ECI LAUNCHES OBSERVER APP

GS 2: Governance | Government policies and interventions for development in various sectors

Prelims Level: Lok Sabha Elections, ECI Observer App

Why in News?

• The Election Commission has for the first time started using a mobile application titled 'Observer App' that will help poll observers to submit reports.

The Observers:

- The IAS, IPS and IRS officials, besides some others from the Central services, who are to be deployed as observers in the coming Lok Sabha and State Assembly polls.
- These officers are being deployed as general, police and expenditure observers.
- They will get all the important notifications, alerts, and urgent messages through the "Observer App".
- It will help them get their deployment status, download the ID card and update their profile.

What does the observer do?

- The observers will be closely involved in real-time disposal of Model Code of Conduct and expenditure violation cases received through another mobile application "cVIGIL", those details will also be available on the "Observer App."
- The observers can make a written observation after the flying squads have investigated the matter.
- They needed to ensure that no mistakes were committed in the process of conducting elections.

MULTI-DEPARTMENTAL COMMITTEE ON ELECTION INTELLIGENCE

GS 2: Governance | Government policies & interventions for development in various sectors & issues arising out of their design & implementation

Mains level: Initiatives for fair and free elections

Why in News?

 The Election Commission of India headed by Chief Election Commissioner along with other two Election Commissioners held a meeting of Multi Departmental Committee on Election Intelligence. Heads of Tax Boards, Law enforcement agencies, Central Paramilitary Forces and representatives of Financial Institutions attended the meeting.

Highlights:

- It is the constitutional mandate of the Election Commission of India to conduct free and fair elections.
- Conducting clean elections is now one of the biggest challenges in our democracy given the prevalent abuse of money power, particularly when it manifests in inducement of voters.
- The Commission is determined to curb this menace and has issued detailed guidelines to monitor election expenditure incurred by candidates and political parties.
- The expenditure monitoring mechanism has got stronger over a period of time and larger seizures have been made by the ECI's enforcement teams in successive elections.
- Individually and collectively the Heads of Tax Boards, Law enforcement agencies, Central Paramilitary Forces and representatives of Financial Institutions are the bulwarks of clean elections.

Way forward:

- Implementation on the field, of instructions of the Commission requires co-ordination among the various expenditure monitoring teams and the agencies tasked with enforcement.
- Sharing of Intelligence amongst the agencies should ensure that there is concerted attack on problems faced.
- Multidimensional, multi-fanged crime needs to be tackled with coordinated action.
- The agencies that due follow-up action on seizures done in previous Model Code of Conduct phase should see demonstrative action against antisocial elements enough to feel deterred next time.
- Election expenditure monitoring mechanism with its two thrust areas of keeping track of
 the legal expenditure incurred by candidates and political parties for election campaigns,
 and more importantly, ensuring that there is no illegal use of money and other items for
 buying of votes, is vital to ensure clean elections.
- Use of money during the elections has increased by leaps and bounds in recent times and
 therefore there is greater need to have synergy amongst various enforcement agencies so
 that a collective strategy is developed to fight this menace.
- The Commission desires that all enforcement agencies should have proper sharing of information for taking coordinated action rather than working in silos.

PREPAREDNESS ON WEST NILE FEVER

GS 2: Governance | Issues relating to development & management of Social Sector/Services relating to Health, Education, Human Resources

Prelims level: West Nile Fever

Why in News?

• The Ministry of Health & Family Welfare with the officials from National Centre for Disease Control (NCDC) reviewed the current situation, state preparedness and action taken to deal with West Nile Fever (WNF) in Malappuram district, Kerala.

Advise of NCDC:

- The State has been advised to follow the National Vector Borne Disease Control Program (NVBDCP) guidelines of personal protective measures to prevent mosquito bites.
- The Ministry has also recommended vector surveillance and control to be carried out in coordination with NVBDCP. All cases of JE/AES are to be investigated as per guidelines of JE (Japanese Encephalitis)/AES (Acute Encephalitis Syndrome) and also tested for West Nile Virus. Further, the community is to be sensitized through IEC campaigns on use of personal protective measures to prevent mosquito bites as per NVBDCP Guidelines.

National Vector Borne Diseases Control Programme:

- It is the national level Technical Nodal office equipped with Technical Experts in the field of Public Health, Entomology, Toxicology and parasitology aspects of malaria.
- The Directorate is responsible for framing technical guidelines & policies as to guide the states for implementation of Programme strategies. It is also responsible for budgeting and planning the logistics pertaining to central sector.

West Nile fever:

- West Nile Fever is a mosquito-borne zoonotic disease caused by a flavivirus -West Nile Virus (WNV).
- This virus is related to viruses that cause Japanese Encephalitis, yellow fever and St. Louis encephalitis. Human infection is most often due to bites from infected mosquitoes.
- To date, no human-to-human transmission of WNV through casual contact has been documented.
- Infection with WNV is either asymptomatic (no symptoms) in around 80% of infected people, or can lead to West Nile fever or severe West Nile disease.

Testing and vector surveillance:

- Testing for West Nile Virus is available at the National Institute of Virology, Pune and National Institute of Virology, Allapuzha.
- Facility for xeno-diagnosis with respect to infection among vectors is available at VCRC, Kottayam. NCDC branch in Kozhikode, in coordination with VCRC, Kottayam, will provide assistance for vector surveillance and xeno-diagnosis in the vector as well as prepare and disseminate a standardised hospital management protocol of AES case management to be followed by all hospitals catering to cases of AES.

Xeno-diagnosis:

 Xeno-diagnosis is a diagnostic method used to document the presence of infectious disease microorganisms or pathogens by exposing possibly infected tissue to a vector and then examining the vector for the presence of the microorganisms or pathogens it may have ingested.

NATIONAL ANTI-PROFITEERING AUTHORITY (NAA)

GS 2: Governance | Government policies & interventions for development in various sectors & issues arising out of their design & implementation

Prelims level: National Anti-profiteering Authority (NAA)

Why in News?

• The National Anti-Profiteering Authority (NAA) is the institutional mechanism under GST law to check the unfair profit-making activities by the trading community.

Functions of NAA:

- To ensure that traders are not realizing unfair profit by charging high price from consumers in the name of GST.
- The responsibility of NAA is to examine and check such profiteering activities and recommend punitive actions including cancellation of Registration.
- To bring transparency in GST
- To bring proactive in persuading the industry and traders in passing on benefits to the consumers.

Constitution of NAA:

• The chairman, NAA along with 4 Technical members and with help of the Standing Committee, Screening Committee in every state and the Directorate General of Safeguards

in the Central Board of Excise & Customs (CBEC), will work together on the antiprofiteering front.

Background:

 The formation of NAA comes in the background of rate-reduction of large number of items by GST Council in its 22nd meeting at Guwahati. At the meeting, the Council reduced rates of more than 200 items including goods and services. This has made tremendous price reduction effect and the consumers will be benefited only if the traders are making quick reduction of prices of respective items.

MDWS MARKS WORLD WATER DAY WITH WATER MANAGEMENT WORKSHOP

GS 2: Governance | Government policies & interventions for development in various sectors & issues

Prelims level: World Water Day

Why in News?

 On the occasion of World Water Day on 22nd March 2019, the Ministry of Drinking Water and Sanitation organised National Workshop on Management of Grey Water in Rural Areas and Arsenic and Fluoride Remediation in collaboration with Indian Institute of Technology (IIT) Madras with support from UNICEF India.

World water day:

 International World Water Day is held annually on 22 March as a means of focusing attention on the importance of freshwater and advocating for the sustainable management of freshwater resources. An international day to celebrate freshwater was recommended at the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. The United Nations General Assembly responded by designating 22 March 1993 as the first World Water Day.

Theme -2019: "Leaving no one behind"

• The theme of 2019 is about tackling the water crisis by addressing the reasons why so many people are being left behind. Marginalized groups – women, children, refugees, indigenous peoples, disabled people – are often overlooked, and may face discrimination, as they try to access safe water. UN Water asserts that "water services must meet the needs of marginalized groups and their voices must be heard in decision-making processes"

REPORT ON SAMPLE SIZE OF VVPAT COUNTING

GS 2: Governance | Government policies & interventions for development in various sectors

& issues

Prelims level: VVPAT, EVM

Why in News?

• The Indian Statistical Institute (ISI) presented its Report on the sample size of Voter Verifiable Paper Audit Trail (VVPAT) slip counting to the Chief Election Commissioner.

Highlights:

• In view of the varying demands for enhanced percentage of VVPAT Slip count during elections in the country, the Commission had engaged the Indian Statistical Institute to systematically analyse and scientifically examine the issue of VVPAT Slip verification with electronic count of the Electronic Voting Machines (EVMs).

ISI:

• Indian Statistical Institute (ISI) is an academic institute of national importance as recognised by a 1959 act of the Indian parliament. ISI is one of the most prominent and reputed national institution devoted to research, teaching and application of statistics and sampling methodology in the country. It grew out of the Statistical Laboratory set up by Prasanta Chandra Mahalanobis. It functions as an autonomous institute under the Ministry of Statistics and Programme Implementation (MOSPI).

EVM:

- EVMs are electronic voting machines which provide the voter with a button for each choice and it is connected by a cable to an electronic ballot box.
- It consists of two units control unit and balloting unit– which are connected by a 5-metre cable. The control unit is with the Election Commission appointed polling officer and the Balloting Unit is in the voting compartment into which the voter enters to cast his/her vote in secret by pressing the button against the name and symbol of the candidate of his/her choice. The EVM runs on a 6-volt single alkaline battery fitted in the control unit, and can even be used in areas that have no electricity.

VVPAT:

VVPAT is a slip generated in a printer-like a machine attached to EVM and flashes voter's
choice of candidate and party. Generated slip is shown for a few seconds to the voter to
cross check before it falls into a sealed drop box which can be opened during counting.

- VVPATs are a second line of verification and are particularly useful in the time when allegations around Electronic Voting Machines' tampering crop up.
- After voting, the VVPAT machine dispenses a paper slip with the name, serial number and symbol of the candidate voted for.

Advantages of VVPAT:

- The Voter Verified Paper Audit Trail is a method that provides feedback to voters.
- It is an independent verification printer machine and is attached to electronic voting machines. It allows voters to verify if their vote has gone to the intended candidate.
- Under VVPATs, initially, election results are announced based on the recording of votes given by EVMs. If the election results are disputed, then the votes recorded under Paper Trail System shall be counted and announced. If there is any discrepancy between the two results, then the result given by VVPAT will prevail over the EVMs. In case of any dispute, the paper slips in the VVPATs can be tallied with the buttons pressed on the EVMs. These printed slips can be counted to verify the results. At the moment, EVMs do not have this feature of cross checking. The use of VVPATs becomes important as a number of political parties have raised questions about the EVMs being tamper proof.
- Though the EC has maintained that the EVMs cannot be tampered with, the use of VVPATs will ensure that there is greater transparency in the voting process.
- As a part of the democratic process, every voter has the right to know that his or her vote
 went to the candidate chosen. VVPATs will ensure this and further strengthen the
 electoral process. It is also perhaps the final step in making the voting process as
 transparent as it can get.

SWACHH SURVEKSHAN 2019

GS 2: Governance | Government policies & interventions for development in various sectors & issues

Prelims level: Swachh Survekshan

Why in News?

• Swachh Survekshan 2019 is the world's largest cleanliness survey conducted to rank cities on various sanitation and cleanliness parameters covering 4237 cities.

Survey:

- Minister of Housing and Urban Affairs (MoHUA) conducted the survey.
- It is a completely digitized and paperless survey.

 The objective of the Swachh Survekshan survey is to encourage citizen participation, increase city capacities for sustainable ODF and sanitation measures and to create awareness amongst all sections of society about the importance of collective action to contribute in India.

Methodology for City Ranking:

- ✓ **Part-1:** Service Level Progress: Verification of data submitted by the Urban Local Bodies on the online MIS portal of MoHUA
- ✓ Part -2: Certification: Star Rating of Garbage Free Cities and Open Defecation Free Protocols
- ✓ **Part-3:** Direct Observation: On-field independent observation and Collection of data
- ✓ **Part-4:** Citizen Feedback: collected from Citizens directly (face to face), through Outbound Calls, 1969, Swachhata App/Swachh Manch and through Swachh Survekshan-2019 portal.

Swachh Manch web portal:

• It is a web-based platform which aims to bring together every stakeholder contributing to the Swachh Bharat Mission under a common platform. It allows stakeholders to create/invite/participate in volunteering opportunities around neighborhoods.

FINTECH CONCLAVE 2019

GS 2: Governance | Government policies & interventions for development in various sectors & issues

Mains Level: Policy efforts and strategy steps for comprehensive financial inclusion.

Why in News?

 NITI Aayog is organising a day-long FinTech Conclave at Dr. Ambedkar International Center, New Delhi.

Objective of the conclave:

 The objective is to shape India's continued ascendancy in FinTech, build the narrative for future strategy and policy efforts, and to deliberate steps for comprehensive financial inclusion. The Conclave will be featuring representatives from across the financial space – central ministries, regulators, bankers, start-ups, service providers and entrepreneurs.

Highlights:

 The Conclave will be featuring representatives from across the financial space – central ministries, regulators, bankers, startups, service providers and entrepreneurs. It will be inaugurated by Governor, RBI. The Reserve Bank of India has categorised these financial technology (or fintech) companies as peer-to-peer (P2P) lenders. The valedictory session of the conclave shall include presentations consolidating sector-specific findings of the various breakout panels on themes such as Digital Onboarding of Customers/Merchants for Financial Inclusion, Building Financial Products for Millennial India, Emerging Areas of FinTech, Fast Tracking Investments in FinTech Industry and Financial Inclusion of MSMEs. Government of India's efforts focused on Digital India and developing India Stack including Voluntary Aadhaar for financial inclusion have evoked significant interest from various stakeholders in the area of Financial Technology (FinTech).

Peer-to-Peer (P2P) lending:

Peer to Peer lending, also known as P2P Lending, is a financial innovation which connects
verified borrowers seeking unsecured personal loans with investors looking to earn higher
returns on their investments. P2P lending service providers have been in business in India
since early 2014. However, it was in September 2017, RBI notified that these will be
registered as non-banking financial companies (NBFCs) and subsequently came out with
guidelines for P2P lending.

Background:

- India is one of the fastest growing FinTech markets globally and industry research has projected that USD 1 Trillion or 60% of retail and SME credit, will be digitally disbursed by 2029. The Indian FinTech ecosystem is the third largest in the globe, attracting nearly USD 6 billion in investments since 2014.
- The Indian FinTech industry is creating cutting edge intellectual property assets in advanced risk management and artificial intelligence that will propel India forward in the global digital economy while simultaneously enabling paperless access to finance for every Indian.

ALLOTMENT OF BROADCAST / TELECAST TIME TO RECOGNIZED NATIONAL / STATE POLITICAL PARTIES

GS 2: Governance | Government policies & interventions for development in various sectors & issues

Prelims & Mains level: Lok Sabha Elections

Why in News?

• The Election Commission has allotted broadcast and telecast time to Recognized National/State Political Parties for the forthcoming Lok Sabha Elections.

Highlights:

- At the time of General Election to Lok Sabha, in February, 1998 the Election Commission
 of India had taken up a new initiative for state funding of recognized political parties,
 through free use of state-owned Television and Radio under directions of the Commission
- The said scheme was subsequently extended in all the General Elections to the Lok Sabha in 1999, 2004, 2009 and 2014 and General Elections to the State Assemblies, held after 1998.
- It said the facilities of use of broadcast time and telecast time will be available for national parties as well as recognised regional parties.
- The EC made it clear that political parties or politicians will not criticise other countries, or make any verbal attack on any community or religion, use defamatory or obscene remarks or incite violence during broadcast and telecast.

Allocation of Time to each party:

• Each National and State party shall be allotted time for telecasts over Doordarshan and broadcasts on All India Radio, according to the following parameters: –

For National Parties:

- Of the ten hours telecasting/broadcasting time reserved over the National channel/hookup of DD/AIR for the National Parties, 45 (forty-five) minutes shall be allotted to each of the 7 National parties, i.e. a total of five hours and fifteen minutes (5-15 hrs), each on the DD & AIR Separately;
- The remaining four hours and forty-five minutes (4 hrs., 45 minutes) telecasting/ broadcasting time shall be further divided among the seven National parties, according to the percentage of votes polled by each such party, at the last General Election to the House of People held in 2014.
- In addition, each National party shall be allotted one and a half times of the total time allotted to it under sub-paras (a) and (b) above, for telecasts/broadcasts on the Regional Doordarshan Kendras/Regional AIR Station;
- Of the total time so allotted to each National Party under sub-para (c), each such party shall have the option to utilise the time so allotted on any of the Regional Doordarshan Kendra/State Capital AIR Station: provided that not more than one-tenth (1/10th) of such time shall be utilised by it at any one Regional Doordarshan Kendras/AIR Stations

For State Parties:

- Of the total time of thirty (30) hours reserved for telecasting/broadcasting by the State parties on the Regional DD Kendras/Regional AIR Stations, each of 52 State Parties shall be allotted thirty (30) minutes i.e. a total of twenty-six (26) hours, each on DD and AIR separately;
- The remaining twelve hours and four hours (4 hours) telecasting/broadcasting time for parties shall be further divided among the said 52 State Parties, according to the percentage of votes polled by each such party in the State(s) in which it is recognized, at the last General Election to the House of the People held in 2014.
- In addition, each State Party shall be allotted 10 minutes telecasting/broadcasting time on Regional Satellite Services channel of DD available to viewers across the whole country and the National hookup of AIR.

DRUGS AND CLINICAL TRIALS RULES, 2019

GS 2: Governance | Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Prelims level: Drugs and Clinical Trials Rules, 2019

Why in News?

• The Union Health Ministry has notified the Drugs and Clinical Trials Rules, 2019 aimed at promoting clinical research in the country.

Drugs and Clinical Trials Rules, 2019:

- The rules will apply to all new drugs, investigational new drugs for human use, clinical trials, bio-equivalence studies and ethics committees.
- The rules has reduced time for approving applications, which has now come down to 30
 days for drugs manufactured in India and 90 days for those developed outside the
 country.
- Also, in case of no communication from Drugs Controller General of India, the application will be deemed to have been approved.
- As per the new rule, the requirement of a local clinical trial may be waived for approval of a new drug if it is approved and marketed in any of the countries (EU, U.K., Australia, Japan and U.S.) specified by the Drugs Controller General with the approval of the government. The new rules will ensure patient safety and an ethics committee will monitor the trials and decide on the amount of compensation in cases of adverse events.

GLOBAL MULTIDIMENSIONAL POVERTY INDEX (MPI) 2018

GS 2: Governance | Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Prelims level: MPI Index

Why in News?

The global Multidimensional Poverty Index (MPI) developed by the United Nations
Development Programme (UNDP) and the Oxford Poverty and Human Development
Initiative (OPHI).

Highlights:

- India reduced its poverty rate sharply from 55 per cent to 28 per cent in ten years between 2005-06 and 2015-16. In India, a total of 271 million (27.10 crore) people moved out of poverty during these ten years.
- In India, poverty reduction among children, the poorest states, Scheduled Tribes, and Muslims was fastest. Although Muslims and STs reduced poverty the most over the 10 years, these two groups still had the highest rates of poverty.
- Bihar was the poorest state in 2015-16, with more than half its population in poverty.
- The four poorest states —Bihar, Jharkhand, Uttar Pradesh, and Madhya Pradesh were still home to 196 million MPI poor people, which was over half of all the MPI poor people in India. Jharkhand had the greatest improvement, followed by Arunachal Pradesh, Bihar, Chhattisgarh, and Nagaland.

MPI poor:

- The report measures multidimensional poverty index, which it says can be broken down to show "who is poor" and "how they are poor".
- These factors in two measures, poverty rate as a percentage of the population, and intensity as the average share of deprivations that poor people experience.
- The product of these two is MPI. If someone is deprived in a third or more of 10 weighted indicators, the global index identifies them as "MPI poor".
- Context: The report, covering 105 countries, dedicates a chapter to India because of this remarkable progress. However, India still had 364 million poor in 2015-16, the largest for any country, although it is down from 635 million in 2005-06.

BIOMEDICAL RESEARCH CAREER PROGRAMME

GS 2: Governance | Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Prelims level: Biomedical Research Career Programme

Why in News?

• The Union Cabinet has approved the continuation of the Biomedical Research Career Programme (BRCP).

Highlights:

- It is implemented by Department of Biotechnology and UK-based biomedical research charity - Wellcome Trust.
- The Wellcome Trust is an independent charity funding research to improve human and animal health.
- It was launched in 2008 and has fulfilled its objectives of building and nurturing talent of highest global standards in cutting-edge biomedical research in India.
- Established in 1936 and with an endowment of around £15 billion, it is the largest non-governmental source of funds for biomedical research in the United Kingdom.
- The Programme will fulfil objectives of building and nurturing talent of highest global standards in cutting-edge biomedical research in India, which has led to important scientific breakthroughs and applications to meet societal needs.
- BRCP will make it attractive for high quality Indian scientists working abroad to return to India, and has increased the number of locations geographically within India where world-class biomedical research is undertaken.
- The Programme would continue to build this capacity as also strengthen clinical research and work towards addressing important health challenges for India.

Cabinet approves additional posts in NCLAT

GS 2: Governance | Government policies & interventions for development in various sectors & issues

Prelims level: NCLAT

Why in News?

 The Union Cabinet has approved the creation of six additional posts in the National Company Law Appellate Tribunal (NCLAT).

Highlights:

- The proposal involves the the creation of three additional posts each for judicial members and technical members in the NCLAT.
- The creation of additional posts will help meet the mandate provided to NCLAT by the Finance Act 2017, the Companies Act 2013 and the Insolvency and Bankruptcy Code 2016.

National Company Law Appellate Tribunal:

- National Company Law Appellate Tribunal (NCLAT) was established under Section 410 of the Companies Act, 2013 for hearing appeals against the orders of National Company Law Tribunal (NCLT). The current Chairperson of NCLAT is Hon'ble Justice Shri S.J. Mukhopadhaya, former Judge of the Supreme Court. NCLAT is the Appellate Tribunal for hearing appeals against the orders passed by Insolvency and Bankruptcy Board of India.
- NCLAT is also the Appellate Tribunal to hear and dispose of appeals against any direction issued or decision made or order passed by the Competition Commission of India (CCI) as per the amendment brought to Section 410 of the Companies Act, 2013 by the Finance Act, 2017. NCLAT is also the Appellate Tribunal for hearing appeals against the orders passed by NCLT(s) under Section 61 of the Insolvency and Bankruptcy Code, 2016 (IBC).
- NCLAT is also the Appellate Tribunal for hearing appeals against the orders passed by Insolvency and Bankruptcy Board of India under Section 202 and Section 211 of IBC.
- NCLAT is also the Appellate Tribunal to hear and dispose of appeals against any direction issued or decision made or order passed by the Competition Commission of India (CCI).

SCIENCE & TECH

ISRO, FRENCH AGENCY TO SET UP MARITIME SURVEILLANCE SYSTEM

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers etc.

Prelims level: Oceansat-3-Argos mission

Why in News?

- ISRO and its French counterpart CNES has sealed an agreement to set up a joint maritime surveillance system in the country.
- The two nations will explore putting up a constellation of low-Earth orbiting satellites.

Oceansat-3-Argos Mission:

 The system will be augmented with the launch of Oceansat-3-Argos mission in 2020 along with a joint infrared Earth-observation satellite. These will identify and track movement of

- ships globally and in particular those moving in the Indian Ocean region where France has its Reunion Islands.
- Before that, they will initially share data from their present space systems and develop new algorithms to analyse them, according to the Paris based National Centre for Space Studies.
- They work together for the design and development of joint products and techniques, including those involving Automatic Identification System (AIS), to monitor and protect the assets in land and sea.

Other collaborations:

• The two agencies have put up two climate and ocean weather monitoring satellites Megha-Tropiques (of 2011) and SARAL-AltiKa (2013) that is considered a model.

YUVA VIGYANI KARYAKRAM PROGRAMME LAUNCHED BY ISRO

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers etc.

Why in News?

• The Indian Space Research Organisation (ISRO) has launched the Young Scientist Programme (Yuva Vigyani Karyakram) to impart basic knowledge on space technology, space science and applications to the young ones to arouse their interest in space activities.

Young Scientist Programme:

- For the Young Scientist Programme, ISRO will select over 100 students from across India and give them practical experience of how satellites are built.
- Three Students will be selected from each state/union territory to participate in the programme each year covering CBSE, ICSE and state syllabus on the basis of their academic performance and extracurricular activities.
- The Young Scientist Programme will involve a two-week residential training programme held each year during summer holidays for students from across the country who have completed class 8 and are studying in class 9.
- The students selected under the programme will also visit ISRO centres, interact with senior scientists, and will have access to research and development facilities.
- The students from rural areas will be given special weightage in the selection and all the expenses of travelling and boarding will be funded entirely by ISRO.

- ISRO will also launch Six incubation centres which will be established in various parts of the country- North, South, East, West, Centre and North-East to allow students to use these centres for R&D purposes.
- The first such centre was established in Agartala, Tripura.

STI COUNCIL LEVERAGES SCIENCE & TECH THROUGH 9 MISSIONS

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers etc.

Prelims Level: Science, Technology and Innovation Council

Why in News?

• The Prime Minister's Science, Technology and Innovation Council has taken up mission mode projects in areas ranging from biodiversity to artificial intelligence (AI).

The mission mode projects:

- The national biodiversity mission is working on comprehensive documentation of the country's biodiversity and development of professionals to handle environmental data for management and monitoring of biodiversity.
- The goal of the mission on waste-to-wealth is to identify, develop and deploy technologies for better use of waste.
- It is designed to assist the Swachh Bharat and Smart Cities projects by leveraging science, technology and innovation to create circular economic models.
- The mission on deep-ocean exploration focuses on better understanding of deeper parts of the seas around the country with a view to harness living and non-living resources that still remain untapped.
- A mission that focussed on genomic study to identify and unravel genetic basis and prevalence of rare and inherited diseases with a view to stimulate better diagnosis and treatment.
- A mission to take research in the area of electric vehicles to a new level. A mission to
 enable access to teaching and researching materials in different areas of science and
 technology in various Indian languages through a combination of machine and human
 translation.
- A mission that will give a thrust to development of quantum computers, quantum chemistry, quantum communication and quantum sensors and another to create new knowledge and develop and deploy applications in the area of artificial intelligence.

SINGLE-LAYER GRAPHENE

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers etc.

Prelims Level: Single-layer graphene

Why in News?

 Researchers at Delhi's National Physical Laboratory (CSIR-NPL) have designed a lowpressure chemical vapour deposition (LPCVD) device that allows high quality, singlelayer graphene.

Highlights:

- The thickness of a single layer is 0.34 nanometre and average grain size of graphene is 1-3 micrometre. Though there are about one billion grains in 4×2 square-inch single-layer graphene, the grains are highly connected to give a single continuous layer of graphene.
- The quality of the single-layer graphene grown using this device is superior than the ones
 reported in the literature. The quality of the single-layer graphene is metrology-grade, and
 can be used in next-generation quantum devices. The graphene was grown on a substrate
 made of copper, which acts as a catalyst.

WEST NILE VIRUS (WNV)

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers etc.

Prelims level: West Nile Virus (WNV)

Why in News?

- A section of the media has reported that a seven-year-old boy from Malappuram District
 of Kerala is suffering from a West Nile Virus (WNV), a mosquito-borne disease, mostly
 reported in the continental United States.
- Health Ministry takes stock of the public health measures for controlling West Nile Virus.

West Nile Virus:

- West Nile virus can cause a fatal neurological disease in humans.
- However, approximately 80% of people who are infected will not show any symptoms.
- West Nile virus is mainly transmitted to people through the bites of infected mosquitoes.
- The virus can cause severe disease and death in horses.
- Vaccines are available for use in horses but not yet available for people.
- Birds are the natural hosts of West Nile virus. West Nile Virus (WNV) can cause neurological disease and death in people. WNV is commonly found in Africa, Europe, the Middle East, North America and West Asia.

 WNV is maintained in nature in a cycle involving transmission between birds and mosquitoes. Humans, horses and other mammals can be infected. West Nile Virus (WNV) is a member of the flavivirus genus and belongs to the Japanese encephalitis antigenic complex of the family Flaviviridae.

IIT KHARAGPUR SIGNS AN MOU WITH C-DAC

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers etc.

Prelims level: Petaflop, National Supercomputing Mission

Why in News?

• IIT Kharagpur has signed an MoU with Centre for Development of Advanced Computing (C-DAC) to set up a 1.3 Petaflop high-performance computing facility and data centre funded under the National Supercomputing Mission.

Highlights:

 The new supercomputing system would be used for specific challenge domains like cryptography, chemistry, molecular dynamics, drug discovery, artificial intelligence and data sciences where the new system would be utilized.

PetaFlop:

• PetaFlop is the measurement of computing power based on the frequency of mathematical calculations that can be done per second.

National Supercomputing Mission:

National Supercomputing Mission initiated in 2015 is being implemented and steered
jointly by the Department of Science and Technology (DST) and Department of Electronics
and Information Technology (DeitY) at an estimated cost of Rs.4500 crore over a period of
seven years.

Objectives of the National Supercomputing Mission:

- The Mission envisages empowering India's national academic and R&D institutions spread by installing a vast supercomputing grid comprising of more than 70 highperformance computing facilities.
- To bring supercomputing within the reach of the large Scientific & Technology community in the country. To provide a significant qualitative and quantitative improvement in R&D and higher education in the disciplines of Science & Technology. To enable the country with a capacity of solving multi-disciplinary grand challenge problems

WATERLESS CHROME TANNING TECHNOLOGY

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers etc.

Prelims level: Waterless chrome tanning technology

Why in News?

- CSIR has come out with a "Game changing technology" for enabling the Indian leather sector achieve the set target of USD 27 billion by 2020 by making leather processing environmentally sustainable.
- This "Waterless chrome tanning technology" is a first of its kind technology to reduce chromium pollution load.

Tanning process:

- Tanning process consists of five stages liming, de-liming, pickling, basification and chrome tanning. About 20 thousand tons of chrome tanning agent is discharged in the wastewater.
- Annually, about 70,000 tonnes of basic chromium sulphate is used. The average uptake (absorption) of chromium by leather pelts during tanning is only 55 per cent out of chrome tanning agent offered.
- About 30,000 tonnes of chromium tanning agent remains unabsorbed and gets discharged along with waste water, which is a huge environmental risk.

Waterless chrome tanning technology (WCTT):

- In WLTT, the de-limed pelts are subjected to pre-treatment. Basic chromium sulfate will be added to the drum without any water.
- Pickling and basification need not be done so discharge of water with high salinity and chloride can be avoided.
- One tonne of hide requires 1,000 litres of water in conventional process.
- 7 lakh tonnes of hides are processed annually, which means 700 MLD of water is saved

Significance of the technology:

- ✓ It completely eliminates two processes before and after tanning
- ✓ Eliminates the use of water in tanning
- ✓ Reduces the total dissolved solids in wastewater from this process by 20%
- ✓ Brings down the usage of chromium by 15-20%, resulting in material saving
- ✓ Complete elimination of water input for chrome tanning
- ✓ No discharge of waste water from chrome tanning

- ✓ Total elimination of pickling and basification
- ✓ Suitable for both hides and skins

GRAPES-3 EXPERIMENT

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology

Prelims level: GRAPES-3 Experiment

Why in News?

- The GRAPES-3 experiment is a special telescope-array established in Ooty to detect muons from cosmic ray showers.
- The experiment has detected a surge in muon intensity correlated with a weakening of the earth's magnetic field due to a solar storm that hit the earth.

GRAPES-3 Experiment:

- GRAPES-3 (Gamma Ray Astronomy PeV EnergieS phase-3) is designed to study cosmic rays with an array of air shower detectors and a large area muon detector.
- It aims to probe acceleration of cosmic rays in the following four astrophysical settings.
- It is located at Ooty in India and started as a collaboration of the Tata Institute of Fundamental Research, Mumbai, India and the Osaka City University, Osaka, Japan.
- For the first time in the world, researchers at the GRAPES-3 muon telescope facility in Ooty have measured the electrical potential, size and height of a thundercloud that passed overhead on December 1, 2014.

Measuring the properties of a Thunderstorm:

- Using a computer simulation and the observed Muon intensity variations, the group worked out the relationship with the electric potential of the cloud.
- They calculated that the potential of the cloud they were studying was approximately 1.3
 Giga Volts. At 1.3 GV this cloud had 10 times higher potential than the previous record in
 a cloud. No one has ever measured potential, size and height of a thundercloud
 simultaneously. Learning about the properties of thunderclouds can be useful in
 navigation of aircraft and preventing short circuits.

Muons:

- Muons and other particles are produced when cosmic rays bombard air particles surrounding the earth. The muons produced can have positive or negative charge.
- When a positively charged muon falls through a cloud, it loses energy.

- If its energy falls below 1 giga electron volt (GeV), which is the threshold of detection of the GRAPES-3 muon telescope, it goes undetected.
- On the contrary, a negatively charged muon gains energy when falling through the cloud and gets detected. Since there are more positive than negative muons produced in nature, the two effects don't cancel out, and a net change in intensity is detected.

YOUNG SCIENTIST PROGRAMME (YUVIKA)

GS 3: Science & Technology | Awareness in the fields of IT, Space etc.

Prelims level: Young Scientists Programme

Why in News?

• ISRO has launched a special programme for school children called Yuva Vigyani Karyakram or Young Scientist Programme.

Programme Highlights:

- The programme aims at imparting basic knowledge on space technology, space science
 and space applications to the younger ones with the intent of arousing their interest in the
 emerging areas of space activities.
- Under the programme, three students each will be selected to participate in it every year from each state and union territory, covering CBSE, ICSE and state syllabus.
- The eligibility for being chosen for the programme includes those students who have finished 8th standard and are currently studying in the 9th standard.
- The selection will be based on the academic performance and extracurricular activities of the students, as per the selection criteria already circulated to the chief secretaries of the states and administrators of Union Territories.
- The students belonging to rural areas have been given special weightage under the selection criteria set by ISRO.

PSLV-C45 / EMISAT MISSION

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology

Prelims level: Emisat Mission

Why in News?

• India's Polar Satellite Launch Vehicle (PSLV), in its 47th mission (PSLV-C45), will launch EMISAT, the primary satellite and other international customer satellites.

Highlights:

- The PS4 orbital platform is envisaged to provide a microgravity environment for research organisations and academic institutes to perform experiments.
- In this mission, the PS4 hosts three payloads, namely,
 - ✓ Automatic Identification System (AIS) from ISRO,
 - ✓ Automatic Packet Repeating System (APRS) from AMSAT (Radio Amateur Satellite Corporation), India and
 - ✓ Advanced Retarding Potential Analyzer for Ionospheric Studies (ARIS) from Indian Institute of Space Science and technology (IIST)
- The 28 international customer satellites are from four countries, viz Lithuania, Spain, Switzerland and USA. All these satellites are being launched under commercial arrangements. They include 24 small satellites from the U.S., among them 20 which are part of previous customer Planet Labs' earth observation constellation.

EMISAT mission:

- EMISAT based on ISRO's Indian Mini Satellite -2 (IMS-2) bus platform. The satellite is intended for electromagnetic spectrum measurement.
- It is is primarily based on the famous Israeli spy satellite called SARAL or (Satellite with ARgos and ALtika), and inherits its SSB-2 bus protocol for conducting sharp electronic surveillance across the length and breadth of India. The satellite would serve as the country's roving device for detecting and gathering electronic intelligence from enemy radars across the borders as it circles the globe roughly pole to pole every 90 minutes or so.

HUMANS CAN DETECT THE EARTH'S MAGNETIC FIELDS

GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology

Prelims level: Magneto-reception in Human beings

Why in News?

- A team of researchers has shown that humans do indeed unconsciously respond to the changes in the earth's magnetic fields.
- Scientists have long known that turtles, birds, honeybees and even bacteria can sense the earth's magnetic field and use them for navigation.

Magneto-reception in Human Beings:

- Magneto-reception has hardly been tested in humans and many studies have been inconclusive.
- The researchers wrapped with electrical coils, which helped simulate the earth's natural magnetic field. The participants were connected to an EEG set-up and their brain activity was monitored. In the one-hour session, for a few minutes, the magnetic field around the chamber was shifted. They noticed that during this period, the alpha power of the brain began to drop. When a human brain is unengaged, the alpha power is high.
- When something catches its attention, consciously or unconsciously, its alpha power drops.

INDIAN SOCIETY

INDIA URBAN OBSERVATORY & VIDEO WALL

GS 1: Social Issues | Urbanization - problems and remedies

Prelims level: Smart cities mission, India Urban Observatory

Why in News?

 Ministry of Housing and Urban Affairs has launched the state-of-the-art India Urban Observatory and Video Wall.

Urban Observatory:

- It is a platform that uses data from different sources to enable analysis and visualization over a geospatial platform can make this possible.
- The concept of Urban Observatories was formally initiated at the UN Habitat-II
 Conference in 1997 in Istanbul. Some examples of well-established Urban Observatories
 are the Global Urban Observatory network, the Dublin Dashboard and the City
 Dashboard of London. Such platforms churn out interesting analyses and visualizations
 by collating massive datasets.

India Urban Observatory:

- It is an important component of the recently launched DataSmart Cities strategy that envisions creating a 'Culture of Data' in cities, for intelligent use of data in addressing complex urban challenges.
- Making cities 'DataSmart' is key to realizing the full potential of technology interventions and innovation ecosystems in cities.

- The Data Smart Cities Policy allows cities to open their data to public view, such as number of hospitals, gardens, people, public toilets and other city management, the official added.
- It will be a separate portal for Smart Cities under the data.gov website.

PANDIT DEENDAYAL UPADHYAYA INSTITUTE OF ARCHAEOLOGY

GS 1: Art and Culture

Why in News?

- Prime Minister Narendra Modi has inaugurated the new Pandit Deendayal Upadhyaya
 Institute of Archaeology in Greater Noida, Uttar Pradesh.
- On the occasion, he also unveiled the statue of Pandit Deendayal Upadhyaya at the campus and visited the Deendayal Museum in the Institute campus.

Pandit Deendayal Upadhyaya Institute of Archaeology:

- Pandit Deendayal Upadhyaya Institute of Archaeology is a state-of-the-art institution spread over 25 acres and built at an estimated cost of Rs. 289 crore.
- The Institute comprises of an auditorium with a seating capacity of 1000 people, an openair theatre and an Archaeological Museum.
- The Institute is an academic wing of the Archeological Survey of India under the Ministry
 of Culture. The Institute provides students with the necessary supportive, enthusiastic and
 challenging academic atmosphere which enables them to achieve their full potential in the
 field of Archaeology.

Archaeological Survey of India (ASI):

- Archaeological Survey of India (ASI), under the Ministry of Culture, is the premier organization for the archaeological researches and protection of the cultural heritage in India. The genesis of systematic archaeological pursuits in India can be traced to the efforts of Sir William Jones, who put together a group of antiquarians to form the Asiatic Society on 15th January 1784 in Calcutta.
- The first legislative attempt to make the government intervene in case of risks to monuments was through Bengal Regulation XIX of 1810.
- ASI regulates all archaeological activities in the country as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958 and Antiquities and Art Treasure Act, 1972.

GEOGRAPHY & ENVIRONMENT

THE NEW DELHI DECLARATION ON ASIAN RHINOS 2019

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Prelims Level: The New Delhi Declaration on Asian Rhinos 2019

Why in News?

 The five rhino range nations signed a declaration 'The New Delhi Declaration on Asian Rhinos 2019' for the conservation and protection of the species at the recently held Second Asian Rhino Range Countries meeting.

Highlights:

• India will collaborate with Bhutan, Nepal, Indonesia and Malaysia to increase the population of three species of Asian rhinos, including the Greater one-horned rhinoceros found in the Indian sub-continent. The declaration was signed to conserve and review the population of the Greater one-horned, Javan and Sumatran rhinos every four years to reassess the need for joint actions to secure their future. Undertaking studies on health issues of the rhinos, their potential diseases and taking necessary steps. Collaborating and strengthening wildlife forensics and strengthening of transboundary collaboration among India, Nepal and Bhutan for conservation of the Greater one-horned rhino.

Asian Rhinos:

- There are three Asian rhino species, all of which have been pushed to the brink of extinction. The greater one-horned is slowly recovering thanks to years of successful conservation efforts but the Sumatran and Javan rhinos remain at great risk.
- They're now found in the wild in just four countries India, Nepal, Bhutan and Indonesia.
- Poaching for their horns and habitat loss are the two greatest threats to the survival of Asia's remaining rhinos.

RED SANDERS IS NOW FREE OF EXPORT RESTRICTIONS

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Why in News?

 The Directorate General of Foreign Trade (DGFT), an agency of the Ministry of Commerce and Industry has revised its export policy to permit its export if it is obtained from cultivated land. • All red sanders farmers, who were not allowed to export their produce as the foreign trade policy prohibited it, now can.

Highlights:

- Ironically, the Indian government had itself asked for quotas to export red sanders from CITES as the tree is categorised as a species that needs protection.
- Estimates suggest that there are more than 3,000 farmers across India who were unable to sell their produce due to the earlier export policy.
- Earlier, only seized logs from smugglers were being exported depending on state government rules. However, red sanders remains listed in the Appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora).

Restrictions:

- The tree is endemic to several districts in Andhra Pradesh and some parts of Tamil Nadu and Karnataka. But over-exploitation prompted the Union government in the 1980s to recommend inclusion of red sanders in Appendix II of CITES.
- The Appendix II says that trade must be controlled in order to avoid utilization incompatible with their survival. The species was listed in Appendix II of CITES in 1995, and subsequently export of red sanders was prohibited in 2004.

Lifting restrictions:

- In 2010, when the CITES was planning to suspend trade of red sanders obtained from India, the government submitted a Non-Detriment Finding (NDF) report saying it must be allowed to export from cultivated sources.
- So in 2012, India got an export quota on red sanders from CITES, under which the country could export 310 tonnes of red sanders obtained from "artificially propagated" sources and 11,806 tonnes of wood from seized sources.

Boosting Farmers and exports:

- Though a farmer can grow the tree, he/she requires permits to fell and transport the
 wood, which was difficult to obtain. Moreover, the price of this wood in the domestic
 market is less than half of what it is in the international market as the demand is low.
- At the same time, the farmer could not even export it earlier as the foreign trade policy
 prohibited it. The GoI should also create a separate Timber Development Board under the
 Ministry of Agriculture and Farmers' Welfare as a single-window system for all farming
 activities to facilitate export process.

Red Sanders:

- Red sanders (Pterocarpus santalinus), known for its rich hue and therapeutic properties, is high in demand across Asia, particularly in China and Japan.
- It is used in cosmetics and medicinal products as well as for making furniture, woodcraft and musical instruments. Its popularity can be gauged from the fact that a tonne of red sanders costs anything between Rs 50 lakh to Rs 1 crore in the international market.

FLOOD MANAGEMENT AND BORDER AREAS PROGRAMME (FMBAP)

GS 3: Environment | Disaster and Disaster Management

Prelims level: Flood Management and Border Areas Programme (FMBAP)

Why in News?

 The Government has approved the "Flood Management and Border Areas Programme (FMBAP)" for Flood Management Works in entire country and River Management Activities.

Highlights of the programme:

- The Scheme "FMBAP" has been framed by merging the components of two continuing XII Plan schemes titled "Flood Management Programme (FMP)" and "River Management Activities and Works related to Border Areas (RMBA)".
- The aim of the Scheme is to assist the State Governments to provide reasonable degree of protection against floods in critical areas by adopting optimum combination of structural and non-structural measures and enhancing capabilities of State / Central Government official in related fields. The scheme will protect valuable land from erosion and flooding and help in maintaining peace along the border.
- The Scheme aims at completion of the on-going projects already approved under FMP.
- The scheme also caters to Hydro-meteorological observations and Flood Forecasting on common rivers with the neighbouring countries.

Funding pattern:

• The funding pattern for FM Component for works in general category States will continue to be 50% (Centre): 50% (State). For projects of North Eastern States, Sikkim, J&K, Himachal Pradesh and Uttarakhand, the funding pattern will continue to be 70% (Centre): 30% (State). River Management Activities and Works related to Border Areas component being specific to activities in border areas with neighbouring countries and in accordance

with bilateral mechanisms, the projects / works will continue to be funded as 100% grant-in-aid / central assistance.

Benefits:

 It will be implemented throughout the country for effective flood management, erosion control and anti-sea erosion. It will benefit towns, villages, industrial establishments, communication links, agricultural fields, infrastructure etc. from floods and erosion in the country. The catchment area treatment works will help in reduction of sediment load into rivers.

INDIA COOLING ACTION PLAN (ICAP)

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Prelims Level: India Cooling Action Plan (ICAP)

Why in News?

India is one of the first countries in the world to develop a comprehensive Cooling Action
plan. It has a long-term vision to address the cooling requirement across sectors and lists
out actions which can help reduce the cooling demand.

India Cooling Action Plan (ICAP):

- The overarching goal of ICAP is to provide sustainable cooling and thermal comfort for all while securing environmental and socio-economic benefits for the society.
- It provides an integrated vision towards cooling across sectors encompassing inter alia reduction of cooling demand, refrigerant transition, enhancing energy efficiency and better technology options with a 20-year time horizon.
- One of the major demands is to reduce cooling demand across sectors by 20% to 25% by 2037-38 and refrigerant demand by 25% to 30% by 2037-38.

Need for ICAP:

- Cooling requirement is cross sectoral and an essential part for economic growth and is required across different sectors of the economy such as residential and commercial buildings, cold-chain, refrigeration, transport and industries
- Cooling is also linked to human health and productivity.
- Linkages of cooling with Sustainable Development Goals (SDGs) are well acknowledged.
- Its cross-sectoral nature of cooling and its use in development of the economy makes provision for cooling an important developmental necessity.

Significance:

- Thermal comfort for all provision for cooling for EWS and LIG housing,
- Sustainable cooling low GHG emissions related to cooling,
- Doubling Farmers Income better cold chain infrastructure better value of produce to farmers, less wastage of produce,
- Skilled workforce for better livelihoods and environmental protection,
- Make in India domestic manufacturing of air-conditioning and related cooling equipment's, Robust R&D on alternative cooling technologies – to provide push to innovation in cooling sector.

PROTECTING THE SUNDARBAN WETLANDS

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Mains level: Conservation of Wetlands

Why in News?

• The Indian Sundarban was accorded the status of 'Wetland of International Importance' under the Ramsar Convention.

Sundarban wetlands:

- 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.
- Located on the southwestern part of the delta, the Indian Sundarban constitutes over 60% of the country's total mangrove forest area.
- It is the 27th Ramsar Site in India, The largest protected wetland in the country.
- The Indian Sundarban, also a UNESCO world heritage site, is home to the Royal Bengal Tiger.

Importance of Sundarbans:

• The Indian Sundarban met four of the nine 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 Sundarban, also a UNESCO world heritage site, is home to the Royal Bengal Tiger. The Ramsar website points out that the Indian Sundarban is also home to a large number of "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 eight of India's 12 species of kingfisher are also found here.
- Recent studies claim that the Indian Sundarban is home to 2,626 faunal species and 90% of the country's mangrove varieties.

Importance of Ramsar recognition:

- The Ramsar status will help to highlight conservation issues of the Sundarbans at the international level. The part of the Sundarban delta, which lies in Bangladesh, was accorded the status of a Ramsar site in 1992, and with Indian Sundarban getting it too, international cooperation between the two countries for the protection of this unique ecosystem will increase.
- This could lead to a better conservation strategy for flagship species such as the tiger and the northern river terrapin.

Causes of wetlands degradation:

- ✓ Major changes in land use for agriculture
- ✓ Grazing
- ✓ Water diversion for dams and canals
- ✓ Water diversion for dams and canals

How did it qualify?

- The Indian Sundarban met four of the nine 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 Ramsar website points out that the Indian Sundarban is also home to a large number of "rare and globally threatened species
- The Indian Sundarban is home to 2,626 faunal species and 90% of the country's mangrove varieties.

Will the status help?

- It will help to highlight conservation issues of the Sundarbans at the international level.
- The international cooperation between India and Bangladesh for the protection of this unique ecosystem will increase. Better conservation strategy for flagship species such as the tiger and the northern river terrapin.

What are the threats?

- Concerns have been raised about natural ecosystems being changed for cultivation of shrimp, crab, molluscs and fish. Fishing and harvesting of aquatic resources as a "high impact" actual threat to the wetland. Dredging, oil and gas drilling, logging and wood harvesting, hunting and collecting terrestrial animals.
- Vulnerable to climate change

Ramsar Convention:

- The Convention on Wetlands of International Importance (better known as the Ramsar Convention) is an international agreement promoting the conservation and wise use of wetlands. It is the only global treaty to focus on a single ecosystem.
- The convention was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975. Traditionally viewed as a wasteland or breeding ground of disease, wetlands actually provide freshwater and food, and serve as nature's shock absorber.
- Wetlands, critical for biodiversity, are disappearing rapidly, with recent estimates showing that 64% or more of the world's wetlands have vanished since 1900.
- Major changes in land use for agriculture and grazing, water diversion for dams and canals and infrastructure development are considered to be some of the main causes of loss and degradation of wetlands

INDIA'S BIODIVERSITY-RICH ZONES ALSO 'HOTSPOTS' OF HUMAN IMPACTS

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Prelims Level: Biodiversity-rich zones - Hotspots, Human Footprint Data

Why in News?

• Human impacts on species occur across 84% of the earth's surface, finds a study published in PLOS Biology, an international journal dedicated to biological science.

Ecological Footprint:

- The Ecological Footprint measures the amount of biologically productive land and sea area an individual, a region, all of humanity, or a human activity that compete for biologically productive space.
- This includes producing renewable resources, accommodating urban infrastructure and roads, and breaking down or absorbing waste products, particularly carbon dioxide

emissions from fossil fuel. The Footprint then can be compared to how much land and sea area is available.

Human Footprint Data:

- Southeast Asian tropical forests including India's biodiversity-rich Western Ghats,
 Himalaya and the north-east also fall in this category; India ranks 16th in such human impacts, with 35 species impacted on average.
- A team of scientists led by James Allan (University of Queensland) found this when they
 mapped the distribution of eight human activities including hunting and conversion of
 natural habitats for agriculture in areas occupied by 5,457 threatened birds, mammals
 and amphibians worldwide.
- Using sources, including the recently-updated Human Footprint data, they found that a staggering 1,237 species are impacted by threats in more than 90% of their habitat; 395 species are affected by threats across their entire range.
- Malaysia ranks first among the countries with the highest number of impacted species (125). India ranks 16th (35 threatened species affected on average).

Roads to Human Footprint in India:

- India has the world's second largest road network.
- While the impact of roads is highest (affecting 72% of terrestrial areas), crop lands affect the highest number of threatened species: 3,834.
- Southeast Asian tropical forests including those in India's Western Ghats, Himalaya and north-east — are among the 'hotspots' of threatened species.
- For instance, the average number of species impacted in the South Western Ghats montane rainforests is 60 and in the Himalayan subtropical broadleaf forests, 53.

Cool spots:

- However, these areas are also 'cool-spots' (the world's last refuges where high numbers of threatened species still persist).
- Cool-spots could be the result of protection or because of intact habitat, said Dr. Allan, adding that India still has crucial refuges that need protecting. Identifying such areas could aid conservation.
- However, these refugia do not necessarily have to be off-limits to human development, just free of the actions that directly threaten species there, add the scientists.

Biodiversity:

- Biodiversity is the variety and differences among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are a part of.
- This includes genetic diversity within. Thus, in essence, biodiversity represents all life. The rich biodiversity has been instrumental in providing humanity with food security, health care and industrial goods that has led to high standard of living in the modern world.
- This diversity of living creatures forms a support system which has been used by each civilization for its growth and development.

GLOBAL ENVIRONMENTAL OUTLOOK REPORT 2019

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Prelims Level: GEO Report

Why in News?

 The most comprehensive and rigorous assessment on the state of the environment report titled Global Environmental Outlook completed by the UN in the last five years was published.

Highlights of the report:

- The report stated drastically scale up environmental protections, or cities and regions in Asia, the Middle East and Africa could see millions of premature deaths by mid-century.
- It warns that pollutants in our freshwater systems will see anti-microbial resistance become a major cause of death by 2050 and endocrine disruptors impact male and female fertility, as well as child neurodevelopment.
- The report highlights the fact that the world has the science, technology and finance it needs to move towards a more sustainable development pathway, although sufficient support is still missing from the public, business and political leaders who are clinging to outdated production and development models.

Innovative policy options:

• The green investment of 2 per cent of countries' GDP would deliver long-term growth as high as we presently projected but with fewer impacts from climate change, water scarcity and loss of ecosystems. Adopting less-meat intensive diets, and reducing food waste in

both developed and developing countries, would reduce the need to increase food production by 50% to feed the projected 9-10 billion people on the planet in 2050.

- An opportunity to increase citizens' well-being while decreasing their environmental
 footprint through improved governance, land-use planning and green infrastructure in
 urban areas. The strategic investment in rural areas would reduce pressure for people to
 migrate.
- The report calls for action to curb the flow of the 8 million tons of plastic pollution going
 into oceans each year. Policy interventions that address entire systems such as energy,
 food, and waste rather than individual issues, such as water pollution, can be much
 more effective.

Global Environment Outlook:

- It is often referred to as UN Environment's flagship environmental assessment.
- It is a flagship report because it fulfills the core functions of the organization, which date back to the UN General Assembly resolution that established the UN Environment Programme in 1972.
- It is a consultative and participatory process to prepare an independent assessment of the state of the environment, the effectiveness of the policy response to address these environmental challenges and the possible pathways to be achieve various internationally agreed environmental goals.

CLIMATE VULNERABILITY INDEX

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment.

Prelims level: Climate vulnerability index

Mains level: Impact of climate change on Himalayas

Why in News?

- The Department of Science and Technology (DST) will be commissioning a study to assess the climate risks faced by States in India.
- This follows an assessment of the global warming risks faced by 12 Himalayan States.

Climate vulnerability index:

 Last year the IIT at Mandi and Guwahati, and the IISc Bengaluru, coordinated with authorities of 12 Himalayan states to evolve a common methodology, and determine how districts there are equipped to deal with the vagaries of climate change.

- They prepared a 'vulnerability index' of each of these States based on district-level data.
- The vulnerability would be a measure of the inherent risks a district faces, primarily by virtue of its geography and socio-economic situation.
- Assam and Mizoram have been identified as most vulnerable to climate change in a study done by various IITs and IISc Bengaluru.
- The eight key parameters included: percentage of area in districts under forests, yield variability of food grain, population density, female literacy rate, infant mortality rate, percentage of population below poverty line (BPL), average man-days under MGNREGA and the area under slope > 30%.
- The key parameters on the basis of which a vulnerability score could be generated:
 - ✓ Percentage of area in districts under forests
 - ✓ Yield variability of food grain
 - ✓ Population density
 - ✓ Female literacy rate
 - ✓ Infant mortality rate
 - ✓ Percentage of population below poverty line (BPL)
 - ✓ The average man-days under MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act)
 - ✓ The area under slope > 30%

Ranking of the states:

- On a scale ranging 0-1, 1 indicating the highest possible level of vulnerability, at the top of the scale were Assam with a score of 0.72 and Mizoram at 0.71, whereas Sikkim, with an index score of 0.42 was relatively less vulnerable.
- This doesn't mean that States with a lower score are safe in an absolute sense.
- In fact, some districts in Uttarakhand [at 0.45 and at the lower end of the scale] are more vulnerable than those in Assam.
- Different factors contributed to a State's vulnerability.
- In Arunachal Pradesh, the key factors are low female literacy and high percentage of population above BPL whereas in Nagaland the key issues are loss of forest cover, steep slope and high yield variability.

THE GLOBAL CHEMICALS OUTLOOK II

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Prelims Level: Global Chemicals Outlook Report

Why in News?

• The second edition of the Global Chemicals Outlook has been released.

Global Chemicals Outlook II:

- The Global Chemicals Outlook II From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development, mandated by the UN Environment Assembly in 2016.
- It seeks to alert policymakers and other stakeholders to the critical role of the sound management of chemicals and waste in sustainable development.
- It takes stock of global trends as well as progress made and gaps in achieving the global goal to minimize the adverse impacts from chemicals and waste by 2020.
- It finds that the global goal to minimize adverse impacts of chemicals and waste will not be achieved by 2020.

Highlights of the report:

- Countries will not meet the internationally agreed goal to minimize the adverse impacts of chemicals and waste by 2020.
- The current chemical production capacity of 2.3 billion tonnes, valued at US\$5 trillion annually, is projected to double by 2030.
- Despite commitments to maximize the benefits and minimize the impacts of this industry,
 hazardous chemicals continue to be released to the environment in large quantities.
- While international treaties and voluntary instruments have reduced the risks of some chemicals and wastes, progress has been uneven and implementation gaps remain.
- The World Health Organization estimated the burden of disease from selected chemicals at 1.6 million lives in 2016, which is likely an underestimate.
- Driven by economic development, population dynamics and other global megatrends, the chemicals market across a range of industry sectors is growing.
- From pharmaceuticals to plant protection, chemicals play an important role in modern society and in achieving the goals of the 2030 Agenda for Sustainable Development.

- Meanwhile, chemical production and consumption is shifting to emerging economies, in particular China.
- Pesticides have been found to negatively impact pollinators, excess use of phosphorous and nitrogen in agriculture continues to contribute to ocean dead zone and chemicals used in sunscreens put pressure on coral reef ecosystems.

INTERNATIONAL WORKSHOP ON DISASTER RESILIENT INFRASTRUCTURE

GS 3: Environment | Disaster and Disaster Management

Prelims level: UNISDR, NDMA, IWDRI

Why in News?

 Second International Workshop on Disaster Resilient Infrastructure (IWDRI) is the workshop organised by the National Disaster Management Authority (NDMA) in collaboration with United Nations Office for Disaster Risk Reduction (UNISDR), and in partnership with the Global Commission on Adaptation, United Nations Development Programme and the World Bank.

Aim and objectives:

- Identify good practices of disaster risk management in key infrastructure sectors,
- Identify specific areas and pathways for collaborative research on DRI (Transport, Energy, Telecom and Water),
- Discuss and co-create the broad contours of the Coalition for Disaster Resilient Infrastructure (CDRI) as well as a notional roll-out plan for the next three years, and
- Build a forum for members to work on areas of common interest and make specific commitments.

Highlights:

- Workshop brings together countries from different parts of the world, multilateral development banks, UN agencies, academia and research institutions, the private sector, academics and policy think tanks to discuss and collaborate on promoting policies and practices towards achieving disaster resilience of large infrastructure systems (transport, telecom, energy, water).
- This will also be a great opportunity to learn from the unique experiences of different countries.

The Sendai Framework for Disaster Risk Reduction AND SDG 9:

- Various international agreements have also reiterated the importance and long-term benefits of investing in resilient infrastructure.
- The Sendai Framework for Disaster Risk Reduction (SFDRR), 2015-2030, which is the first
 major agreement of the post-2015 development agenda, identifies investing in Disaster
 Risk Reduction (DRR) for resilience and to build back better in reconstruction as priorities
 for action towards reducing disaster risk.
- Similarly, Goal 9 of the Sustainable Development Goals (SDGs) recognizes disaster resilient infrastructure as a crucial driver of economic growth and development.

INDIA PILOTS RESOLUTIONS ON SINGLE-USE PLASTICS AND SUSTAINABLE NITROGEN MANAGEMENT

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Why in News?

 India piloted resolutions on two important global environment issues relating to Singleuse Plastics and Sustainable Nitrogen management at the fourth session of United Nations Environment Assembly (UNEA) which was held in Nairobi.

Highlights:

- UNEA adopted both the resolutions with consensus.
- The global nitrogen use efficiency is low, resulting in pollution by reactive nitrogen which threatens human health, eco system services, contributes to climate change and stratospheric ozone depletion.
- A small proportion of the plastics produced globally are recycled with most of it damaging the environment and aquatic bio-diversity.
- It was highlighted that climate finance is an important lever for climate action related to both mitigation and adaption in the developing countries.
- The contributions to climate finance need to be in consonance with the basic principles of common but differentiated responsibility and respective capabilities (CBDR-RC).
- India has been initiating domestic climate actions, both related to climate change mitigation and adaptation, primarily through its own financial resources.

INDO-JAPAN WORKSHOP ON DISASTER RISK REDUCTION

GS 3: Environment | Disaster and Disaster Management

Prelims level: Indo-Japan Workshop

Why in News?

The 3rd Indo-Japan Workshop on Disaster Risk Reduction was held at New Delhi. The
workshop was attended by delegates from Japan and India including experts from both
the governments, top premium research institutes, city administrators, specialized
Disaster Management agencies and private sector.

Highlights:

- The Government of India and the Government of Japan had signed a Memorandum of Cooperation (MoC) in the field of Disaster Risk Reduction (DRR) in September 2017.
- The 3rdworkshop was organized with an objective of enhancing collaboration between research institutes, cities and the private sector in the field of Disaster Risk Reduction.

What is Disaster?

• A disaster refers to a catastrophe, mishap, calamity or grave occurrence from natural or man-made causes, which is beyond the coping capacity of the affected community.

Disaster management:

• A typical DM continuum comprises six elements; the Pre-disaster phase includes prevention, mitigation and preparedness, while the Post-disaster phase includes response, rehabilitation, reconstruction and recovery.

Disaster Risks in India:

- India is vulnerable, in varying degrees, to a large number of natural as well as man-made disasters.
- 6 per cent of the landmass is prone to earthquakes of moderate to very high intensity;
- over 40 million hectares (12 per cent of land) is prone to floods and river erosion; of the 7,516 km long coastline, close to 5,700 km of coast is prone to cyclones and tsunamis;
- 68 per cent of the cultivable area is vulnerable to drought and hilly areas are at risk from landslides and avalanches.
- Vulnerability to disasters/emergencies of Chemical, Biological, Radiological and Nuclear (CBRN) origin also exists. Heightened vulnerabilities to disaster risks can be related to expanding population, urbanisation and industrialisation, development within high-risk zones, environmental degradation and climate change.

• In the context of human vulnerability to disasters, the economically and socially weaker segments of the population are the ones that are most seriously affected. Within the vulnerable groups, elderly persons, women, children— especially women rendered destitute, children orphaned on account of disasters and differently abled persons are exposed to higher risks.

NGT DIRECTS CPCB TO PREPARE NOISE POLLUTION MAPS

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Why in News?

 The National Green Tribunal (NGT) has directed the Central Pollution Control Board (CPCB) to prepare a noise pollution map and remedial action plan to solve the issue of noise pollution across the country.

Highlights:

- CPCB has been directed to prepare a noise pollution map and identify hotspots and categorise the cities with specified hotspots and propose a remedial action plan.
- Noting the establishment of the noise monitoring mechanism in seven cities, NGT asked CPCB to consider setting up of such mechanisms in all cities where noise pollution is beyond permissible limits. Further, the police departments of all the States and Union Territories are asked to obtain the noise monitoring devices within a period of three months and specification of such devices may be finalised in consultation with the respective state PCBs and pollution control committees. NGT asked for setting up of public address systems with equipment that can monitor the noise pollution parameters and alert authorities once the prescribed limits are crossed.
- NGT noted that the absence of implementation of noise pollution norms affects the health of citizens, especially infants and senior citizens.

Central Pollution Control Board:

- The Central Pollution Control Board (CPCB) of India is a statutory organisation under the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- It was established in 1974 under the Water (Prevention and Control of pollution) Act, 1974.
- CPCB is also entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.

- It serves as a field formation and also provides technical services to the Ministry of Environment and Forests under the provisions of the Environment (Protection) Act, 1986.
- It Co-ordinates the activities of the State Pollution Control Boards by providing technical assistance and guidance and also resolves disputes among them

INDIA'S FIRST FOREST-CERTIFICATION SCHEME GETS GLOBAL RECOGNITION

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Prelims level: Forest Certification

Why in News?

 Recently, a Geneva-based non-profit decided to endorse the Certification Standard for Sustainable Forest Management (SFM) developed by Network for Certification and Conservation of Forests (NCCF), an Indian non-profit.

Forest Certification:

- Forest certification is a global movement initiated in 1990s after Rio Earth Summit.
- It is a market-based non-regulatory conservation tool designed to promote sustainable management of forests and trees outside forests by an independent third party.
- As several developed countries have put trade restrictions on import of non-certified timber, non-timber forest products and wood-based goods into their countries, getting sustainable forest management certificates has become mandatory for exports.

Significance:

- The council of Programme for Endorsement of Forest Certification (PEFC) that provides independent third-party certification for sustainable forest management took this decision through a postal ballot.
- India now has a globally recognised forest-certification scheme developed specifically for Indian forests.

NCCF:

 Forest-based industries in India, particularly those for paper, boards, plywood, medium density fibreboard, furniture and handicrafts etc, have been pushing for forest certification to enhance their market accessibility to western markets including European Union and USA.

- The NCCF was set up in 2015 by representatives of forest-based industries, non-profits, forest auditors and government forest departments with an aim to set standards for certifying India's forests, their products and their sustainable management.
- The NCCF's forest certification scheme is aimed to improve India's forest management regime that is often criticised for various issues ailing the sector such as forest rights, forest degradation, biodiversity losses, encroachments, lack of manpower, etc.

IEA CO2 EMISSION STATUS REPORT

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Why in News?

- International Energy Agency (IEA) has released Global Energy & CO2 Status Report.
- India emitted 2,299 million tonnes of carbon dioxide in 2018, a 4.8% rise from last year, according to the report.

Global Energy & CO2 Status Report:

- India's emissions growth this year was higher than that of the United States and China —
 the two biggest emitters in the world.
- This was primarily due to a rise in coal consumption.
- China, the United States, and India together accounted for nearly 70% of the rise in energy demand.
- India's per capita emissions were about 40% of the global average and contributed 7% to the global carbon dioxide burden.
- The United States, the largest emitter, was responsible for 14%.

Global Findings:

- Global energy consumption in 2018 increased at nearly twice the average rate of growth since 2010, driven by a robust global economy and higher heating and cooling needs in some parts of the world.
- Demand for all fuels increased, led by natural gas, even as solar and wind posted double digit growth. Higher electricity demand was responsible for over half of the growth in energy needs.
- Energy efficiency saw lacklustre improvement. As a result of higher energy consumption, carbon dioxide emissions rose 1.7% last year and hit a new record, the authors of the report said in a press statement.

• The United States had the largest increase in oil and gas demand worldwide. Gas consumption jumped 10% from the previous year, the fastest increase since the beginning of IEA records in 1971.

India's commitment:

- As per its commitments to the UNFCCC, India has promised to reduce the emissions intensity of its economy by 2030, compared to 2005 levels.
- It has also committed to having 40% of its energy from renewable sources by 2030 and, as part of this, install 100 GW of solar power by 2022. However, the IEA report showed that India's energy intensity improvement declined 3% from last year even as its renewable energy installations increased 10.6% from last year.
- India says it will cost at least \$2.5trillion (Rs. 150 trillion approx.) to implement its climate pledge, around 71% of the combined required spending for all developing country pledges.

IEA:

- Established in 1974 as per framework of the OECD
- MISSION The IEA works to ensure reliable, affordable and clean energy for its 30 member countries and beyond. Our mission is guided by four main areas of focus: energy security, economic development, environmental awareness and engagement worldwide.
- It is headquartered in Paris, France.
- Its mandate: To focus on the "3Es" of effectual energy policy:
 - ✓ Energy security.
 - ✓ Economic development.
 - ✓ Environmental protection.

ISLAND PROTECTION ZONE (IPZ) 2019

GS 3: Environment | Conservation, environmental pollution and degradation, environmental impact assessment

Why in News?

 The Union Ministry of Environment, Forest and Climate Change has notified Island Protection Zone (IPZ) 2019 for Andaman and Nicobar.

Highlights:

• It allows eco-tourism projects 20 meters from the high tide line (HTL) in smaller islands like Baratang, Havelock, and Car Nicobar.

- In case of larger islands, 50 meters from the HTL is permitted.
- It allows for eco-tourism activities like mangrove walks, tree huts and nature trails in island coastal regulation zone(ICRZ) IA (ICRZ 2018: ICRZ IA, provides areas classified as the most eco-sensitive region of the islands which includes turtle nesting grounds, marshes, coral reefs etc)
- The notification also allows for construction of roads, roads on stilts by reclaiming land in
 exceptional cases for defense installations, public utilities or strategic purposes in ecosensitive zones. In case construction of such roads pass through mangroves, a minimum
 three times the mangrove area destroyed during the construction process shall be taken
 up for compensatory plantation of mangroves elsewhere.
- Changes in the IPZ are aligned with the Niti Aayog's proposal for holistic development in the Islands. The government's planning to open up the blue economy and sustainable harnessing of ocean resources.

ECONOMY

CONSTRUCTION TECHNOLOGY INDIA-2019 EXPO-CUM-CONFERENCE

GS 3: Economy | Development- Infrastructure

Why in News?

• Construction Technology India is being organised to identify proven, innovative and globally established technologies for use in the Indian context.

Highlights:

- The Ministry of Housing and Urban Affairs, Government of India has conceptualized a
 Global Housing Technology Challenge India (GHTC- India) which aims to identify and
 mainstream a basket of innovative technologies from across the globe, that are sustainable
 and disaster-resilient.
- Pradhan Mantri Awas Yojana Urban (PMAY-U) targets the construction of 1 Crore housing units by 2022.
- Within the ambit of the overarching PMAY (U), a Technology Sub-Mission (TSM) was set up, to facilitate the adoption of innovative, sustainable, green and disaster-resilient technologies and building materials for low-cost, speedier and quality construction of houses.
- The GHTC-India platform aspires to provide an eco-system for the adoption of innovative technologies in the housing construction sector in a holistic manner.

Benefits of the Expo-Cum-Conference:

- Potential technology providers can benefit from the support provided by Affordable Sustainable Housing Accelerators- India (ASHA-India) initiative.
- Proven technologies which are identified during CTI 2019 will be further invited to design and build lighthouse projects. GHTC-India will also contribute substantially towards achieving the Sustainable Development Goals (SDGs) as laid out by the United Nations (UN), the New Urban Agenda and the Paris Climate Accord to which India is a signatory and similar international commitment by gradually migrating from inefficient & carbon intensive processes to cleaner and compliant options. GHTC-India will bring about a paradigm shift in the manner in which construction is not only done but also received and perceived in the country.

ASSAM TO BE OIL EXPORTING HUB

GS 3: Economy | Energy Infrastructure

Why in News?

• Assam is slated to soon become one of India's major oil exporting hubs catering to the eastern neighbours of the country and Southeast Asia.

Highlights:

- There are slew of projects for augmenting oil exploration, refining and transportation capacity in various stages of completion in the region.
- Eight of these projects under Hydrocarbon Vision 2030 for north-east India.
- Assam will soon send petrol and diesel to Bangladesh, Bhutan, Myanmar, and Southeast Asian countries.

Objectives:

To leverage the region's hydrocarbon potential, enhance access to clean fuels, improve
availability of petroleum products, facilitate economic development and to link common
people to the economic activities in this sector. The states covered include Arunachal
Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The
Ministry also undertook series of consultations with the state governments while drafting
the vision document.

Hydrocarbon Vision 2030 for north-east India:

• The Vision Document has been a focused and consultative exercise to develop a common and shared aspiration for benefiting people of the north east region.

- With involvement and inputs of various stakeholders, industry players and state governments, the Vision document not only includes the ambition for the region but also an actionable roadmap.
- The policy focus areas include moderation in light of specific terrain and weather conditions of the region coupled with ensuring fund planning for new projects.
- In projects, the focus is on pipeline connectivity for carrying liquefied petroleum gas (LPG), natural gas, and petroleum products, oil and lubricants (POL); building refineries and import links; and development of compressed natural gas (CNG) highways and city gas distribution network.
- The production side emphases include production enhancement contracts, technology deployment and fast-track clearance, and development of service provider hubs.

The Vision rests on five pillars;

- ✓ People
- ✓ Policy
- ✓ Partnership
- ✓ Projects
- ✓ Production

IRCTC LAUNCHES PAYMENT AGGREGATOR IRCTC IPAY

GS 3: Economy | Development-Infrastructure

Prelims Level: IRCTC iPay

Why in News?

- Indian Railway Catering and Tourism Corporation (IRCTC) has launched its own payment aggregator system, IRCTC iPay.
- This is a step towards promoting the Government's Digital India initiative.

IRCTC iPay:

- IRCTC iPay is a prepaid card cum wallet.
- With IRCTC iPay, IRCTC will have full control of the payment system because of its direct relationship with acquiring banks, card networks and other partners.
- This direct and full control will eventually lead to a substantial reduction in payment failures. Further in case of an online transaction is unsuccessful or some other error occurs, IRCTC can directly get in touch with the bank instead of relying on an intermediate source which usually delays the process.

- With IRCTC iPay passengers will not need any third-party platforms as the IRCTC iPay provides payment options like credit card, debit card, UPI-Unified Payment Interface and International Card.
- The exclusive digital payment gateway will provide an improved online digital payment convenience and ease of doing business to passengers availing online travel-related services through the IRCTC website.

NATIONAL COMMON MOBILITY CARD

GS 3: Economy | Infrastructure: Energy, Ports, Roads, Airports, and Railways etc.

Prelims Level: National Common Mobility Card

Why in News?

• The Indigenous Automatic Fare Collection (AFC) System based on One Nation One Card Model i.e. National Common Mobility Card (NCMC) is the first of its kind in India.

Objectives:

- To develop the vendor agnostic interoperable ecosystem for NCMC
 - ✓ Indigenous AFC System
 - ✓ Banking interface

National Common Mobility Card:

- These are bank issued cards on Debit/Credit/Prepaid card product platform.
- The customer may use this single card for payments across all segments including metro, bus, suburban railways, toll, parking, smart city and retail.
- The stored value on card supports offline transaction across all travel needs with minimal financial risk to involved stakeholders.
- The service area feature of this card supports operator specific applications e.g. monthly passes, season tickets etc.
- It is developed by National Payment Corporation of India in association with the Ministry of Housing & Urban Affairs (MoHUA).
- India's First Indigenously Developed Payment Eco-system for transport consisting of NCMC Card, SWEEKAR (Swachalit Kiraya: Automatic Fare Collection System) and SWAGAT (Swachalit Gate) is based on NCMC Standards

SOCIETY FOR WORLDWIDE INTERBANK FINANCIAL TELECOMMUNICATIONS

GS 3: Economy | Banking

Prelims level: Society for Worldwide Interbank Financial Telecommunications

Why in News?

- Half a dozen public and private sector banks have been slapped with monetary penalties
 by the Reserve Bank of India for non-compliance of directions in the Swift (Society for
 Worldwide Interbank Financial Telecommunications) messaging system used by banks
 worldwide for foreign currency transfers.
- The penalty has been levied for delay in compliance to RBI's directives on Time-bound implementation & strengthening of SWIFT-related controls.

SWIFT:

- It is a messaging network that financial institutions use to securely transmit information and instructions through a standardized system of codes.
- Under SWIFT, each financial organization has a unique code which is used to send and receive payments.
- SWIFT neither holds funds on its own nor manages external client accounts.
- SWIFT is headquartered in Belgium.

Why does it matter?

- Messages sent by SWIFT's customers are authenticated using its specialised security and identification technology.
- Encryption is added as the messages leave the customer environment and enter the SWIFT
 Environment. Messages remain in the protected SWIFT environment, subject to all its
 confidentiality and integrity commitments, throughout the transmission process while
 they are transmitted to the operating centres (OPCs) where they are processed until
 they are safely delivered to the receiver.

TRANSPORT AND MARKETING ASSISTANCE (TMA)

GS 3: Economy | Infrastructure: Energy, Ports, Roads, Airports, and Railways etc.

Why in News?

 Department of Commerce of the Ministry of Commerce & Industry has notified a scheme for Transport and Marketing Assistance (TMA) for Specified Agriculture Products.

Objectives:

- The "Transport and Marketing Assistance" (TMA) for specified agriculture products scheme aims to provide assistance for the international component of freight and marketing of agricultural produce.
- To mitigate disadvantage of higher cost of transportation of export of specified agriculture products due to trans-shipment.
- To promote brand recognition for Indian agricultural products in the specified overseas markets. The scheme would be suitably included in the Foreign Trade Policy (2015-20).

Highlights:

- The scheme will be available for exports effected from March 1, 2019 to March 31, 2020.
- Eligibility: All exporters, duly registered with relevant Export Promotion Council as per Foreign Trade Policy, of eligible agriculture products shall be covered under this scheme.
- The assistance, at notified rates, will be available for export of eligible agriculture products
 to the permissible countries, as specified from time to time. The assistance shall be
 admissible only if payments for the exports are received in Free Foreign Exchange through
 normal banking channels. The scheme shall be admissible for exports made through EDI
 (Electronic Data Interchange) ports only.
- The scheme covers freight and marketing assistance for export by air as well as by sea.
- Exceptions: The assistance is available for most agricultural product exports with some exceptions such as live animals, products of animal origin, milk, cream, curd, butter, buttermilk, whey, rice, wheat, tobacco and garlic.

NEW MEASURES TO PROMOTE HYDRO POWER SECTOR

GS 3: Economy | Infrastructure: Energy, Ports, Roads, Airports, and Railways etc.

Prelims Level: Hydro Power Sector

Why in News?

 The Union Cabinet chaired by Prime Minister Narendra Modi has approved measures to promote the Hydro Power Sector, which include declaring Large Hydropower Projects (HPO) as part of non-solar Renewable Purchase Obligation (RPO)

Highlights:

Large Hydropower Projects to be declared as a renewable energy source. As per the
existing practice, only hydropower projects less than 25MW are categorized as a
renewable energy source.

- HPO as a separate entity within non-solar renewable purchase obligation to cover large hydropower projects commissioned after notification of these measures. The small hydropower projects are already covered under the Non-Solar Renewable Purchase Obligation.
- The trajectory of annual HPO targets will be notified by Ministry of Power based on the
 projected capacity addition plans in hydropower sector and the necessary amendments
 will be introduced in the tariff policy and tariff regulations to operationalise HPO.
- The tariff rationalisation measures include providing flexibility to the developers to determine tariff by backloading of tariff after increasing project life to 40 years, increasing debt repayment period to 18 years and introducing escalating tariff of 2 per cent.
- They also include budgetary support for funding flood moderation component of hydropower projects on case to case basis.
- They also include budgetary support for funding cost of enabling infrastructure that is roads and bridges on case to case basis as per actual, limited to Rs 1.5 crore per MW for upto 200 MW projects and Rs 1.0 crore per MW for above 200 MW projects.

Impact:

- Considering most of the hydro power potential is located in the higher reaches of the
 Himalayas and north-east region, the new measures to promote the Hydro Power Sector
 are expected to result in the overall socio-economic development of the region by
 providing direct employment in the power sector.
- The measures will also provide indirect employment and entrepreneurial opportunities in the field of transportation, tourism and other small-scale businesses.
- Another major benefit would be of having a stable grid considering 160 GW capacity addition by 2022 from infirm sources of power like solar and wind.

India's Hydropower potential:

- India is endowed with large hydropower potential of 1, 45,320 MW of which only about 45,400 MW has been utilised so far. Only about 10,000 MW of hydropower has been added in the last 10 years.
- The hydropower sector is currently going through a challenging phase and the share of hydropower in the total capacity has declined from 50.36 per cent in the 1960s to around 13 per cent in 2018-19. Besides being environmental-friendly, hydropower has several

- other unique features like the ability for quick ramping, black start, reactive absorption, which make it ideal for peaking power, spinning reserve and grid balancing and stability.
- Further, hydropower also provides water security, irrigation and flood moderation benefits, apart from socio-economic development of the entire region by providing employment opportunities and boosting tourism.

KIRU HYDRO ELECTRIC (HE) PROJECT

GS 3: Economy | Infrastructure: Energy, Ports, Roads, Airports, and Railways etc.

Why in News?

 The Cabinet Committee on Economic Affairs has approved the investment sanction for construction of Kiru Hydro Electric (HE) Project (624 MW) by M/s Chenab Valley Power Projects Private Limited (M/s CVPPPL) in Jammu & Kashmir.

Highlights:

- The project is located on River Chenab in Kishtwar district of Jammu & Kashmir.
- It envisages construction of a 135 m high concrete gravity Dam above deepest foundation level.
- The project shall provide much needed power in northern grid
- It shall accelerate process of development of remote areas of Jammu and Kashmir.
- The Project is scheduled to be completed in a period of 4 1/2 years.
- Project is envisaged as a Run of River (RoR) Scheme, designed complying with the requirements of Indus Water Treaty 1960

NATIONAL MISSION ON TRANSFORMATIVE MOBILITY AND BATTERY STORAGE

GS 3: Economy | Infrastructure: Energy, Ports, Roads, Airports, and Railways etc.

Prelims Level: National Mission on Transformative Mobility, Phased Manufacturing

Programme

Why in News?

 The Union Cabinet has approved setting up of a National Mission on Transformative Mobility and Battery Storage, to drive clean, connected, shared, sustainable and holistic mobility initiatives.

Highlights:

- It has also approved the creation of a Phased Manufacturing Programme valid for a period of 5 years till 2024 to localise production across the entire Electric Vehicles value chain. Both the schemes will be finalised by the National Mission on Transformative Mobility and Battery Storage.
- It has also approved Phased Manufacturing Programme (PMP) valid for 5 years till 2024 to support setting up of a few large-scale, export-competitive integrated batteries and cellmanufacturing Giga plants in India.

Significance:

- The mission will drive mobility solutions that will bring in significant benefits to the industry, economy and country.
- These solutions will help improve air quality in cities along with reducing India's oil import dependence and enhance the uptake of renewable energy and storage solutions.
- The mission will also lay down the strategy and roadmap which will enable India to leverage upon its size and scale to develop a competitive domestic manufacturing ecosystem for electric mobility.
- The actions in this regard will benefit all citizens as the aim is to promote 'Ease of Living' and enhance the quality of life of our citizens and also provide employment opportunities through 'Make-in-India' across a range of skill sets.

National Mission on Transformative Mobility and Storage:

Composition:

- The multi-disciplinary mission with an Inter-Ministerial Steering Committee will be chaired by NITI Aayog CEO.
- The other members of the steering committee will include Secretaries from Ministry of Road Transport and Highways, Ministry of Power, Ministry of New and Renewable Energy, Department of Science and Technology, Department of Heavy Industry, Department for Promotion of Industry and Internal Trade, and Director General, Bureau of Industrial Standards.

Mission Responsibilities:

• The mission will recommend and drive the strategies for transformative mobility and Phased Manufacturing Programmes for EVs, EV Components and Batteries. The Phased Manufacturing Program will be launched to localise production across the entire EV value

chain and the National Mission on Transformative Mobility and Battery Storage will determine the final details of the programme

- The details of the value addition that can be achieved with each phase of localisation will
 be finalised by the mission with a clear make in india strategy for the electric vehicle
 components as well as battery.
- The mission will also coordinate with the key stakeholders in the ministries and departments and the states to integrate various initiatives to transform mobility in India.
- A phased roadmap to implement battery manufacturing at Giga-scale will be considered
 with an initial focus on a large-scale module and pack assembly plants by 2019-20,
 followed by integrated cell manufacturing by 2021-22.
- The details of the PMP for Batteries shall be formulated by the mission. The mission will
 ensure the holistic and comprehensive growth of the battery manufacturing industry in
 India. It will also prepare the necessary roadmap that will enable India to leverage upon
 its size and scale to produce innovative, competitive multi-modal mobility solutions that
 can be deployed globally in diverse contexts.
- Further, the mission will define the roadmap for transformative mobility in 'New India'
 by introducing a sustainable mobility ecosystem and fostering Make-in-India to boost
 domestic manufacturing and employment generation in the country.

IDUKKI'S MARAYOOR JAGGERY GETS GI TAG

GS 3: Economy

Prelims Level: GI tag

Why in News?

- The Marayoor Jaggery, the traditional and handmade product from Idukki district of Kerala, received the Geographical Indication (GI) tag from the Central Government.
- The Marayoor jiggery finally managed to get the GI Tag after two years of continuous efforts by the Agricultural Department of the state.
- The GI tag will provide more windows of opportunity to the traditional sugarcane farmers in Marayoor.

Significance:

At present, the farmers of the district receive only Rs 45 to 47 per kilo for the jiggery, instead of the expected Rs 80 to Rs 100 per kilo. One of the major challenges faced by the jiggery farmers is the sale of fake jaggery from Tamil Nadu, which is sold with the similar

tag of Marayaoor jaggery. This has led to the constant fall in the price of the original jiggery. This has even forced several farmers to give up sugarcane cultivation.

 The GI tag will help the Marayoor farmers get more market and price. Moreover, with the GI Tag, only the natives of the area can now produce and market the Marayoor jaggery exclusively.

Marayoor Jaggery:

- The Jaggery is produced in Marayoor, a town in Idukki district of Kerala.
- It is one of the sweetest jaggeries produced in Idukki.
- It is made from sugarcane and no chemicals are added during the manufacturing process.
- It is dark brown in colour, high in sweetness and iron, with less sodium content and insoluble impurities. It is not produced in modern factories or using modern equipment. It is prepared in sheds located on the sugarcane farm.
- Workers from Onakkallur, a village in Udumalpet in Tamil Nadu, are also engaged in the production of the Marayoor jaggery.

Geographical Indication (GI):

- A Geographical Indication (GI) tag is a name or sign used on products which corresponds to a specific geographical location or origin. It can be a town, a region, or a country.
- The use of a geographical indication acts as a certification that the product possesses
 certain qualities, is made according to traditional methods, and enjoys a certain reputation
 due to its geographical origin. It plays a very important role to increase the realm of the
 market.
- It boosts exports as well tourism and more importantly, it indirectly leads to sustainable development.

UDAN SCHEME: REVIVAL OF UN-SERVED AND UNDER-SERVED AIR STRIPS

GS 3: Economy | Infrastructure: Energy, Ports, Roads, Airports, and Railways etc.

Prelims Level: RCS-UDAN Scheme

Why in News?

• The Cabinet Committee on Economic Affairs (CCEA)approved the extension of time and scope for revival and development of un-served and under-served air strips of State Governments, Airports Authority of India (AAI), Civil enclaves, CPSUs, helipads and water aerodromes.

 The revival of these un-served and under-served air strips will be carried out at the total cost of Rs 4500 crore with the budgetary support of the Union Government under the Regional Connectivity Scheme (RCS) - UDAN (Ude Desh ka Aam Naagrik).

Significance:

- Small cities and towns will be connected on commencement of operation of flights to under-served and un-served airports.
- It will boost the economic development of these areas as well as surrounding areas in terms of job creation and related infrastructure development.

Developments under the RCS-UDAN Scheme:

- The Union Ministry of Civil Aviation received overwhelming response from the airlines in two rounds of bidding held so far under the RCS UDAN.
- In the first round of UDAN bidding, 128 routes were assigned to five airline operators for 43 un-served/underserved airports/airstrips on March 31, 2017.
- In second round of UDAN bidding, the response from airline operators considerably improved wherein 86 proposals involving 325 routes were awarded to 15 selected airline operators in January 2018. During the UDAN version 1.0 & 2.0, 66 airports and 31 heliports (28 unserved heliports and 3 unserved airports) were identified.
- During UDAN version 3.0, tourism routes in coordination with Ministry of Tourism; and Seaplanes for connecting Water Aerodromes were included to increase the tourism potential at the coastal areas

UDAN (Ude Desh Ka Aam Naagrik) Scheme:

- UDAN, launched in April 2017, is a flagship scheme of the Union Government to enable air operations on unserved routes, connecting regional areas, to promote balanced regional growth and to make flying affordable for masses.
- The UDAN Scheme is a key component of the National Civil Aviation Policy (NCAP) which was launched in June 2016.
- Under the scheme, 24 airports in the western region, 17 in the northern region, 11 in the southern region, 12 in east and six in north-eastern parts of the country will be connected under this scheme. The government will also connect around 50 unserved and underserved airports with the scheme. The operators linked under the scheme are Air India subsidiary Airline Allied Services, SpiceJet, Air Deccan, Air Odisha and Turbo Megha. They would be operating 19-78-seater aircraft.

 Operators will have to provide 50 percent of the flight capacity with a cap of Rs 2500 per hour and a minimum of five and a maximum of 13 people on helicopters with the same price cap.

WHITE LABEL AT

GS 3: Economy

Prelims level: WLAs and other types of ATMs

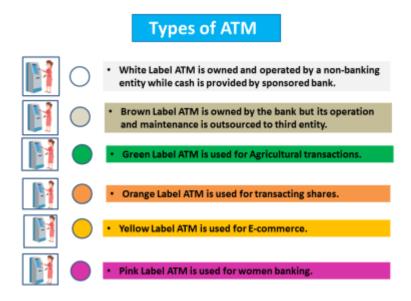
Mains level: RBI guidelines for currency handling and cyber-security framework

Why in News?

- The RBI has relaxed norms for white label ATM (WLA) operators.
- All guidelines, safeguards, standards and control measures applicable to banks relating to currency handling and cyber-security framework for ATMs shall also be applicable to the WLA operators, the RBI said.

White Label ATM Operators:

- Automated Teller Machines (ATMs) set up, owned and operated by non-bank entities are called WLAs.
- They provide the banking services to the customers of banks in India, based on the cards (debit/credit/prepaid) issued by banks.
- Non-bank entities that set up, own and operate ATMs are called "White Label ATM Operators" (WLAO).
- The WLAO's role is confined to acquisition of transactions of all banks' customers by establishing technical connectivity with the existing authorized, shared ATM and Card Payment Network Operators.



Relaxed norms by RBI:

- The RBI has been decided to allow WLAs to buy wholesale cash, above a threshold of 1 lakh pieces (and in multiples thereof) of any denomination, directly from the RBI.
- The RBI also permitted WLA operators to source cash from any bank, including cooperatives and regional rural banks.
- They are also being allowed to source cash from any scheduled bank, including cooperative banks and regional rural banks and to offer bill payment and Interoperable Cash Deposit services, subject to technical feasibility and certification by the National Payments Corporation of India (NPCI).
- RBI has also allowed WLA operators to display advertisements pertaining to non-financial products or services anywhere within the WLA premises, including the ATM screen, except the main signboard.

CII-EXIM BANK CONCLAVE ON INDIA-AFRICA PROJECT PARTNERSHIPS

GS 3: Economy

Prelims Level & Mains Level: CII-EXIM Bank Conclave

Why in News?

 Ministry of Commerce & Industry will be organising the 14th CII-EXIM Bank Conclave on India-Africa Project Partnerships, in association with Confederation of Indian Industry and EXIM Bank of India in New Delhi.

Highlights:

- The Conclave will mark the pre-eminence of India-Africa partnership in the area of 'South-South Cooperation', at a time when the global economy is faced with intractable challenges that stem from rising protectionism and trade conflicts.
- The India-Africa bilateral partnership is augmented by India's ascendency as the fastest growing major economy, as well as Africa's new economic dynamism illustrated by some of the Sub-Saharan economies which are among the top 10 fastest growing economies in the world.
- The knowledge sessions at the Conclave will focus upon the potential areas for bilateral
 economic and business partnerships, core capabilities of Indian and African enterprises
 and opportunities for joint ventures thereof, innovative financing of significant
 development projects, skill development and capacity building.
- The deliberations will be guided by long-term goals and objectives:

✓ Scaling up India-Africa bilateral trade volume to USD150 billion in the next few years. Encouraging Indian exporters to access the African countries and increase

their presence in the region

✓ Enabling geographical and product diversification of Indian exports to Africa

✓ Enhancing manufacturing exports of Africa by optimal utilisation of Duty-Free

Tariff Preference scheme and capacity building support from India

✓ Expanding Indian investments in areas like infrastructure, agriculture and food-

processing, energy, services, IT and knowledge industries

Significance:

The event will mark the deepening of India-Africa economic and business ties and pave

the way for a whole range of cross-border project partnerships.

The annual Conclave, since its inception in 2005, brings senior Ministers, policy makers,

officials, business leaders, bankers, technologists, start-up entrepreneurs and other

professionals from India and Africa on a common platform in a spirit of partnership.

The Conclave coheres into the Indian Government's broader vision of long-term

engagement with Africa. The Government of India's unflinching commitment to

expanding the canvas of India-Africa economic partnership which is evident from the

increase in bilateral trade between India and Africa by nearly 22% from last year touching

USD 62.66 billion in the year 2017-18.

INDIA LAUNCHES THIRD IT CORRIDOR IN CHINA

GS 3: Economy | Effects of liberalization on the economy, changes in industrial policy and

their effects on industrial growth.

Prelims level: Xuzhou IT Corridor Project

Mains level: India's IT Sector

Why in News?

India has launched its third IT corridor in China that will facilitate partnerships between

Indian and Chinese companies.

Xuzhou IT Corridor Project:

China being a dominant manufacturing country requires software, IT and IT enabled

services to transform towards smart manufacturing. The National Association of Software

and Services Companies (NASSCOM) entered into a partnership with China's Xuzhou city

from Jiangsu Province in China to help develop the IT corridor.

- The IT industry body has already launched such corridors at Dalian and Guiyang cities to cash in on the burgeoning Chinese IT industry market.
- These have already sprung up opportunities to the tune of 24 Million RMB (USD 4.6 million) and 62 Million RMB (USD 8.9 million) respectively, it said.

Significance:

- The first two corridors have paved the way for cooperation in co-create mode in the emerging technologies such as AI, IoT and Analytics in the Chinese market.
- Xuzhou is the geographic and economic center of over 20 cities and in China's regional economic layout, the city has slowly established itself as an industrial powerhouse.
- Xuzhou is an important comprehensive national transportation hub and its proximity
 from major industrial and economic hub like Shanghai, Beijing, Hangzhou, Nanjing and
 Suzhou. This will facilitate match-making between Indian companies wanting to
 collaborate with companies in Huai Hai economic zone looking.
- This partnership will help create more jobs in Xuzhou and India and facilitating talent transfer between the two countries.

NASSCOM:

- The National Association of Software and Services Companies (NASSCOM) is a trade association of Indian Information Technology (IT) and Business Process Outsourcing (BPO) industry.
- Established in 1988, NASSCOM is a non-profit organisation.

CONSUMER PRICE INDEX NUMBERS

GS 3: Economy | Changes in industrial policy and their effects on industrial growth.

Prelims Level: Consumer Price Index

Why in News?

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation
has revised the Base Year of the Consumer Price Index (CPI) from 2010=100 to 2012=100
with effect from the release of indices for the month of January 2015.

Consumer Price Index - CPI:

 The Consumer Price Index (CPI) is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. It is calculated by taking price changes for each item in the predetermined basket of goods and averaging them.

How CPI is used?

- CPI is widely used as an economic indicator. It is the most widely used measure of inflation and, by proxy, of the effectiveness of the government's economic policy.
- The CPI gives the government, businesses and citizens an idea about prices changes in the economy, and can act as a guide in order to make informed decisions about the economy.
- The CPI and the components that make it up can also be used as a deflator for other economic factors, including retail sales, hourly/weekly earnings and the value of a consumer's dollar to find its purchasing power
- The index can also be used to adjust people's eligibility levels for certain types of government assistance including Social Security and it automatically provides the cost-of-living wage adjustments to domestic worker.

Types of CPI:

- CPI for Industrial Workers released monthly by Labour Bureau of the Labour Ministry.
- CPI for Agricultural Labourers/Rural Labourers released monthly by Labour Bureau of the Labour Ministry. CPI (Rural/Urban/Combined) is compiled and released by Central Statistics Office (CSO) of the Statistics Ministry.

STANDARDS & LABELLING (STAR RATING) PROGRAM

GS 3: Economy | Changes in industrial policy and their effects on industrial growth.

Prelims Level: Energy Labels -Standard & Labeling of India

Why in News?

 Ministry of Power, Government of India expanded its ambitious Standards & Labelling (Star Rating) program for Energy Efficient for Appliances to cover the Microwave Ovens and Washing Machines (with revised parameters) in the country

Energy Labels:

- Energy labels are informative labels affixed to manufactured products to indicate the product's energy performance. Usually they are in the form of relative rankings of energy performance.
- The energy parameters indicate quantitatively how much energy is consumed by the product or the energy efficiency rating of that product and/or, other related requirements.
 Energy labels can stand alone or complement energy standards.

Objectives of Standard & Labeling of India:

The Objectives of the Standards & Labeling Program are:

- ✓ To provide the consumer an informed choice about the energy saving, and thereby the cost saving potential of the labeled household products and other electronics/electrical products. To impact the energy savings in the medium and long run. To position domestic industry to compete in international markets where norms for energy efficiency in many countries are mandatory.
- S&L in India works on a model in which the permittee provides information related to energy efficiency of the product on the label as prescribed in the respective product regulation, statutory order and/or schedule issued by the Bureau from time to time.
- A star rating, ranging from 1 to 5 in the ascending order of energy efficiency is provided to products registered with the Bureau. An endorsement label is also provided for some products. The S & L scheme was launched by the Bureau of Energy Efficiency Govt. of India in May, 2006 and is currently in place for equipments/appliances that include Frost Free Refrigerators, Tubular Fluorescent Lamps, Room Air Conditioners, Direct Cool Refrigerators, Distribution Transformers, Electric Motors, Pump Sets, Ceiling Fans, LPG Stoves, Electric Geysers, Colour TVs and Washing Machines.

Benefits of Energy Labeling:

- ✓ Enhancement in consumer welfare, as the scheme empower consumers with data on informed choices and encourage selection of the most efficient products.
- ✓ Reduction in capital investment for energy supply infrastructure;
- ✓ Enhancement in national economic efficiency by reducing energy bills;
- ✓ Strengthening competitive markets;
- ✓ Meeting climate change goals through reduction of CO2 / GHGs; and
- ✓ Averting urban/regional pollution.

RBI CATEGORISES IDBI AS A PRIVATE BANK

GS 3: Economy | Banking

Prelims Level: Domestic Systemically Important Banks (D-SIBs)

Why in News?

 Debt-ridden Industrial Development Bank of India has been categorised as a private sector bank by the Reserve Bank of India, with effect from January 21, 2019.

Highlights:

• The Life Insurance Corporation of India (LIC) acquiring 51 per cent of the total paid-up equity share capital of the bank.

• IDBI Bank was earlier categorised under a new sub-group "Other Public Sector Banks" by the RBI.

D-SIBs:

- Domestic Systemically Important Banks (D-SIBs) means that a bank is 'too big to fail'.
- The the State Bank of India, , ICICI Bank and HDFC Bank will continue to be identified as Domestic Systemically Important Banks (D-SIBs).
- The Reserve Bank had issued the framework for dealing with D-SIBs on July 22, 2014
- The framework requires the central bank to disclose the names of banks designated as D-SIBs starting from 2015 and place these banks in appropriate buckets depending upon their Systemic Importance scores.

UNNATEE (UNLOCKING NATIONAL ENERGY EFFICIENCY POTENTIAL)

GS 3: Economy | Energy

Prelims level: UNNATEE

Why in News?

- Bureau of Energy Efficiency (BEE) has developed a national strategy document for accelerating energy efficiency in India.
- PwC India has assisted BEE in executing this assignment.

UNNATEE:

- The strategy document titled UNNATEE (Unlocking NATional Energy Efficiency potential) describes a plain framework and implementation strategy to establish a clear linkage between energy supply-demand scenarios and energy efficiency opportunities.
- The document offers a comprehensive roadmap to address India's environmental and climate change mitigation action through energy efficiency measures. This exercise is first of its kind, clearly delineating the energy efficiency targets for the respective demand sectors upto the state levels. Developing India's blueprint of effective energy efficiency strategy is a leap towards stimulating energy efficiency ecosystem and enabling reduction of the pressure on demand.

BEE:

- The BEE is a statutory body under the Ministry of Power, Government of India.
- It assists in developing policies and strategies with the primary objective of reducing the
 energy intensity of the Indian economy. BEE coordinates with designated consumers,
 designated agencies, and other organizations to identify and utilize the existing resources

and infrastructure, in performing the functions assigned to it under the Energy Conservation Act.

EXCHANGE TRADED FUND (ETF)

GS 3: Economy

Prelims Level: Exchange Traded Fund (ETF)

Why in News?

The Department of Investment and Public Asset Management (DIPAM) is slated to launch
a fresh tranche of Central Public Sector Enterprises (CPSE) Exchange Traded Fund (ETF)
to raise Rs 4,000-5,000 crore in disinvestment.

ETF:

- ETFs are index funds that are listed and traded on stock exchanges just like regular shares.
- They are a basket of stocks with assigned weights that reflect the composition of an index.
- The ETFs trading value is based on the net asset value of the underlying stocks that it
 represents. They enable investors to gain broad exposure to entire stock markets in
 different countries and specific sectors with relative ease, on a real-time basis and at a
 lower cost than many other forms of investing.
- The ETF is aimed at helping speed up the government's disinvestment programme.

Bharat 22 ETF:

- Bharat 22 ETF comprises of stocks of 22 Central Public Sector Enterprises (CPSEs), Public Sector Banks (PSBs) and Specified Undertaking of Unit Trust of India (SUUTI).
- Bharat 22 ETF is managed by ICICI Prudential Mutual Fund.
- The foundation of Bharat 22 ETF was laid by the government in the Union Budget 2017.

FINANCIAL STABILITY AND DEVELOPMENT COUNCIL (FSDC)

GS 3: Economy | Mobilization of resources

Prelims level: FSDC

Why in News?

• Financial Stability and Development Council (FSDC) meeting was chaired by the Union Finance Minister.

FSDC:

• The Financial Stability and Development Council (FSDC) was constituted in December, 2010. The FSDC was set up to strengthen and institutionalise the mechanism for

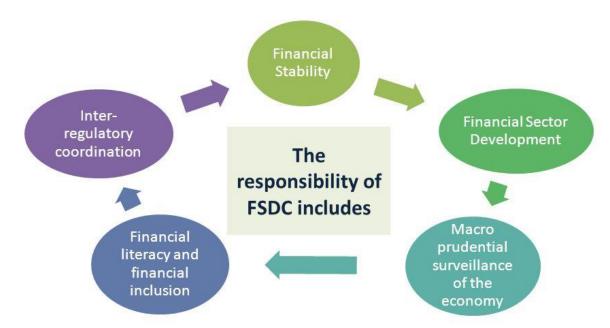
maintaining financial stability, enhancing inter-regulatory coordination and promoting financial sector development. An apex-level FSDC is not a statutory body.

Functions:

- The Council deals, inter-alia, with issues relating to financial stability
- Financial sector development
- Inter-regulatory coordination
- Financial literacy
- Financial inclusion and
- Macro prudential supervision of the economy including the functioning of large financial conglomerates.
- No funds are separately allocated to the Council for undertaking its activities.

Financial Stability and Development Council

The FSDC, set up in 2010, is a body consisting all regulators and the Ministry of Finance. It is the highest forum in matters relating to financial stability. The Council is chaired by the Union Finance Minister



Constitution of FSDC:

- The Council is chaired by the Union Finance Minister. The members are:
 - ✓ Governor, Reserve Bank of India
 - ✓ Finance Secretary and/or Secretary, Department of Economic Affairs

- ✓ Secretary, Department of Financial Services; Chief Economic Adviser, Ministry of Finance
- ✓ Chairman, Securities and Exchange Board of India
- ✓ Chairman, Insurance Regulatory and Development Authority
- ✓ Chairman, Pension Fund Regulatory and Development Authority
- ✓ Chairman, Insolvency and Bankruptcy Board (IBBI)
- ✓ Secretary, Ministry of electronics and information technology (MeitY)

IBBI, SEBI SIGN MOU FOR BETTER IMPLEMENTATION OF IBC

GS 3: Economy | Mobilization of resources

Prelims level: IBC

Why in News?

• The Insolvency and Bankruptcy Board of India (IBBI) signed a Memorandum of Understanding (MoU) with the Securities and Exchange Board of India (SEBI).

Highlights:

- The IBBI and the SEBI seek effective implementation of the Insolvency and Bankruptcy Code, 2016 (Code) and its allied rules and regulations, which have redefined the debt-equity relationship and aims to promote entrepreneurship and debt market.
- They have agreed under the MoU to assist and co-operate with each other for the effective implementation of the Code, subject to limitations imposed by the applicable laws.
- The MoU provides for:
 - ✓ Sharing of information between the two parties, subject to the limitations imposed by the applicable laws;
 - ✓ Sharing of resources available with each other to the extent feasible and legally permissible;
 - ✓ Periodic meetings to discuss matters of mutual interest, including regulatory requirements that impact each party's responsibilities, enforcement cases, research and data analysis, information technology and data sharing, or any other matter that the parties believe would be of interest to each other in fulfilling their respective statutory obligations;
 - ✓ Cross-training of staff in order to enhance each party's understanding of the other's mission for effective utilisation of collective resources;
 - ✓ Capacity building of insolvency professionals and financial creditors;

✓ Joint efforts towards enhancing the level of awareness among financial creditors about the importance and necessity of swift insolvency resolution process of various types of borrowers in distress under the provisions of the Code, etc.

RBI'S EXPERT COMMITTEE ON MSME

GS 3: Economy

Why in News?

 The U.K. Sinha led Expert Committee on Micro, Small & Medium Enterprises (MSME) of the Reserve Bank of India (RBI) undertook a comprehensive review of the MSME sector to identify causes and to propose long term solutions for its development.

Highlights:

- The Expert Committee on Micro, Small and Medium Enterprises (MSMEs) was constituted on January 2, 2019 under the chairmanship of U.K. Sinha, former Chairman of the Securities and Exchange Board of India (SEBI).
- The Committee was constituted with an aim to understand the structural bottlenecks and factors affecting the performance of the MSMEs. After a thorough study, it will propose long term solutions for the economic and financial sustainability of the MSME sector.
- The Expert Committee will submit its report by the end of June 2019.
- In this regard, the Committee has invited suggestions from the public on the following aspects by March 28, 2019
 - ✓ To suggest definition of MSME for classification and identification of MSME on the basis of investment and turnover based criteria
 - ✓ Suggestions for improving the role of District Industrial Centres (DICs) and whether the DICs have met the intended objective?
 - ✓ Infrastructural gaps and problems affecting the development of the MSME clusters
 - ✓ Suggestions for addressing the structural gaps in capacity building of entrepreneurs.
 - ✓ Whether there is awareness about bill discounting facility TReDS (Trade Receivables Discounting System) and suggestions for improving finance through TReDS
 - ✓ Suggestions for improving the credit rating mechanism for MSMEs

Terms of reference of the committee:

• Review the current institutional framework in place to support the MSME sector

- Study the impact of the recent economic reforms on the MSME sector and identify the structural problems affecting its growth
- Examine the factors affecting the timely and adequate availability of finance to the sector
- Study the global best practices with respect to MSMEs and recommend its adoption in India. Review the existing MSME focused policies and its impact on the sector
- Propose measures for leveraging technology in accelerating growth of the sector
- Suggest long-term solutions for the economic and financial sustainability of the MSME sector

Constitution of Committee announced in RBI Policy:

- The central bank announced the constitution of the Committee in its Fifth Bi-Monthly Monetary Policy Statement 2018-19, that was released on December 5, 2018.
- MSMEs contribute significantly to employment, entrepreneurship and growth in the
 economy. However, they remain vulnerable to structural and cyclical shocks. It is
 important to understand the economic forces and transactions costs affecting the
 performance of the MSMEs.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

GS 3: Economy | Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Prelims level: IATA

Why in News?

• SpiceJet has joined global airlines' grouping International Air Transport Association (IATA) as a member, becoming the first Indian low-cost carrier to get the membership.

IATA:

- The International Air Transport Association is a trade association of the world's airlines.
- IATA supports airline activity and helps formulate industry policy and standards.
- It is headquartered in Montreal, Quebec, Canada with Executive Offices in Geneva, Switzerland. Consisting of 290 airlines, primarily major carriers, representing 117 countries, the IATA's member airlines account for carrying approximately 82% of total available air traffic.

Benefits of joining IATA:

- The IATA represents more than 290 airlines, including Air India, Jet Airways and Vistara.
- SpiceJet is the first Indian low-cost carrier to be an IATA member, and fifth member in India.

- The IATA membership is significant for rapidly expanding the airline's international footprint.
- The membership allows the airline to explore and grow its collaborations with international member airlines of IATA through interlining and code shares.
- This in turn enables an airline to seamlessly expand the network options for its passengers in future.
- The membership will further enable us to inculcate global best practices and innovations.

VOLUNTARY RETENTION ROUTE (VRR) SCHEME OF RBI

GS 3: Economy | Mobilization of resources

Prelims level: VRR Scheme

Why in News?

The RBI's decision to infuse rupee liquidity through long term foreign exchange swap, a
first of its kind in liquidity management policy, is likely to boost investments by foreign
portfolio investors under the voluntary retention route (VRR).

Voluntary Retention Route (VRR):

- RBI had announced a separate scheme called VRR to encourage Foreign Portfolio Investors (FPIs) to undertake long-term investments in Indian debt markets.
- Under this scheme, FPIs have been given greater operational flexibility in terms of instrument choices besides exemptions from certain regulatory requirements.
- The details are as under:
- The aggregate investment limit shall be ₹ 40,000 crores for VRR-Govt and ₹ 35,000 crores for VRR-Corp. The minimum retention period shall be three years. During this period, FPIs shall maintain a minimum of 75% of the allocated amount in India.
- Investment limits shall be available on tap for investments and shall be allotted by Clearing Corporation of India Ltd. (CCIL) on 'first come first served' basis.

Benefits of VRR:

- The RBI will conduct dollar-rupee buy/sell swap action of \$5 billion for a three-year tenor.
- Such a swap route has been explored by various emerging market economies as an
 effective tool to manage liquidity. Apart from liquidity infusion, the move will boost the
 country's foreign exchange reserves and is likely to support the exchange rate.

DISINVESTMENT EXCEEDS TARGET

GS 3: Economy

Why in News?

• For the second year in a row, the government has exceeded the disinvestment target of Rs 80,000 crore set for the Financial Year 2019, which ends in March.

Highlights:

- Against a goal of ₹80,000 crore in FY19, divestments have touched ₹85,000 crore with completion of the acquisition of Rural Electrification Corporation (REC) by Power Finance Corporation (PFC) for Rs 14,500 crore.
- Meeting the disinvestment target for the current fiscal year was crucial because of the uncertainty in revenue collection from direct taxes as well as from the goods and services tax (GST).
- This will enable the government to achieve the revised fiscal deficit target of 3.4% of gross domestic product (GDP).
- The budgeted fiscal deficit target was 3.3% of gross domestic product (GDP) at the
 beginning of 2018-19 and was later revised to 3.4% of gross domestic product in the
 interim budget, mainly because of an expectation of higher pay-out because of the direct
 income scheme for farmers.

Disinvestment:

- Disinvestment means selling of assets. In the case of Public Sector Undertakings, disinvestment means Government selling/ diluting its stake (share) in PSUs in which it has a majority holding.
- Disinvestment is carried out as a budgetary exercise, under which the government announces yearly targets for disinvestment for selected PSUs.
- Recently, in April 2016, the Department of Disinvestment (under Ministry of Finance) was renamed as Department of Investment and Public Asset Management (DIPAM).
- DIPAM is the nodal agency of Union Finance Ministry mandated to advise the Union Government in the matters of financial restructuring of PSUs and also for attracting investment through capital markets.
- It will also deal with all matters relating to sale of Union Government's equity in PSUs through private placement or offer for sale or any other mode in the erstwhile Central PSUs.

ENERGY TRANSITION INDEX 2019

GS 3: Economy | Energy Infrastructure

Prelims level: Energy Transition index 2019

Why in News?

World Economic Forum has released its global Energy Transition index (ETI) for 2019.

Energy Transition index:

- The report contains the Energy Transition Index (ETI), which compares the energy sectors of 115 countries and analyses their readiness for energy transition.
- It does this by benchmarking countries' energy systems based on an "energy triangle",comprised of:
 - ✓ energy security and access
 - ✓ economic development and growth
 - ✓ environmental sustainability
- Sweden retains first spot, followed by Switzerland, Norway and Finland.
- Countries with high ETI scores also performed well on their readiness for energy transition, with Finland topping that list, followed by Denmark, and Austria in third.
- By contrast, countries at the bottom of the ranking often lack effective regulatory frameworks and suffer from political instability.
- The report outlines a seven-step roadmap for countries to overcome the barriers to energy transition. These include identifying influential energy sector champions, establishing an operational structure to drive collaboration and defining specific milestones and action plans.

Declining Global trend:

- Overall the global energy transition has slowed with year-on-year increases in global average ETI scores at their lowest for five years – here's the breakdown:
- Energy security and access scores showed great improvement, driven by gains in access to electricity in emerging markets, particularly in Asia.
- Environmental sustainability scores improved marginally, indicating a general lack of substantive progress.
- Economic development and growth scores declined compared to the previous year, due to rising household electricity prices and commodity price volatilities.

India's performance:

- India secured 76th position and moved up two places from its 78th position in 2018.
- India was found to be amongst the countries with high pollution levels and relatively high CO2 intensity in its energy system. Despite this, the report found that India has made significant strides to improve energy access in recent years and currently scores well in the area of regulation and political commitment towards energy transition.
- While India scored low in terms of system performance, it ranks considerably higher when it comes to readiness to adapt to future energy needs
- India is among the five economies that have managed to improve their rank since last year.
- In the BRICS bloc of emerging economies, India was ranked second best, only after Brazil.

TRADE RECEIVABLES E-DISCOUNTING SYSTEM (TREDS)

GS 3: Economy

Prelims level: Trade Receivables e-Discounting System (TReDS)

Why in News?

The RBI has set up the Trade Receivables Discounting System (TReDs).

TReDS:

- TReDS is an online mechanism for facilitating the financing of trade receivables of MSMEs
 through multiple financiers. It also enables discounting of invoices of MSME sellers raised
 against large corporate, allowing them to reduce working capital needs. It is a financing
 arrangement where technology is leveraged for discounting bills and invoices which
 assists Micro, Small, and Medium Enterprises (MSMEs) to deal with working capital and
 cash flow problems due to delayed payments.
- It has been set up under the regulatory framework set up by RBI under Payment and Settlement Systems Act 2007.

Trade Receivables:

- Trade Receivables is the accounting entry in the balance sheet of an entity, which arises due to the selling of the goods and services by the Entity to its customers on credit.
- Since this is an amount which the Entity has a legal claim over its customer and also the customer is bound to pay the same to Entity.

THE REGULATORY SANDBOX / INNOVATION HUB

GS 3: Economy

Why in News?

• The Reserve Bank of India (RBI) will issue guidelines within two months for fintech companies to test their new products on a small group of users before scaling up.

Regulatory sandbox:

 A regulatory sandbox is a safe harbour, where businesses can test innovative products under relaxed regulatory conditions. Typically, participating companies release new products in a controlled environment to a limited number of customers for a limited period of time.

What is the need?

• Fintech or financial technology companies use technology to provide financial services such as payments, peer-to-peer lending and crowdfunding, among others.

Significance and benefits:

- It will help fintech companies launch innovative products at a lower cost and in less time.
- It will enable fintech companies to conduct live or virtual testing of their new products and services. The companies will also be able to test the viability of the product without a wider and expensive rollout. It will help companies to experiment with fintech solutions, where the consequences of failure can be contained and reasons for failure analysed.
- To protect customers and safeguard the interests of all stakeholders, and streamline their influence on the financial system

GI CERTIFICATION FOR FIVE VARIETIES OF INDIAN COFFEE

GS 3: Economy | Major crops cropping patterns in various parts of the country, different types of irrigation.

Prelims level: GI Certification, Indian coffee varieties

Why in News?

 The Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India has recently awarded Geographical Indication (GI) to five varieties of Indian coffee.

Five varieties of Indian coffee:

• **Coorg Arabica coffee** is grown specifically in the region of Kodagu district in Karnataka.

- Wayanaad Robusta coffee is grown specifically in the region of Wayanad district which is situated on the eastern portion of Kerala.
- Chikmagalur Arabica coffee is grown specifically in the region of Chikmagalur district and it is situated in the Deccan plateau, belongs to the Malnad region of Karnataka.
- Araku Valley Arabica coffee can be described as coffee from the hilly tracks of Visakhapatnam district of Andhra Pradesh and Odisha region at an elevation of 900-1100 Mt MSL.
- The coffee produce of Araku, by the tribals, follows an organic approach in which they emphasise management practices involving substantial use of organic manures, green manuring and organic pest management practices.
- **Bababudangiris Arabica coffee** is grown specifically in the birthplace of coffee in India and the region is situated in the central portion of Chikmagalur district.
- Selectively hand-picked and processed by natural fermentation, the cup exhibits full body, acidity, mild flavour and striking aroma with a note of chocolate.
- This coffee is also called high grown coffee which slowly ripens in the mild climate and thereby the bean acquires a special taste and aroma.
- The **Monsooned Malabar Robusta Coffee**, a unique specialty coffee from India, was given GI certification earlier.

Coffee cultivation in India:

- In India, coffee is cultivated in about 4.54 lakh hectares by 3.66 lakh coffee farmers of which 98% are small farmers.
- Coffee cultivation is mainly done in the Southern States of India: Karnataka 54%, Kerala
 19%, Tamil Nadu 8%
- Coffee is also grown in non-traditional areas like Andhra Pradesh and Odisha (17.2%) and North East States (1.8%).
- India is the only country in the world where the entire coffee cultivation is grown under shade, hand-picked and sun dried.
- India produces some of the best coffee in the world, grown by tribal farmers in the
 Western and Eastern Ghats, which are the two major bio-diversity hotspots in the world.
 Indian coffeeis highly valued in the world market and sold as premium coffee in Europe.

INTERNATIONAL RELATIONS

INDIA JOINING IEA BIOENERGY TCP

GS 2:IR | Agreements involving India and/or affecting India's interests

Why in News?

• Government of India joining International Energy Agency's Technology Collaboration Programme on Bioenergy (IEA Bioenergy TCP) as its 25th member.

IEA Bioenergy TCP:

- 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.
- Member countries: 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.
- IEA Bioenergy TCP works under the framework of International Energy Agency (IEA) to which India has "Association" status since 30th March, 2017.

Significance on joining IEA Bioenergy TCP:

- 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.
- It 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 carried out within well-defined 3-years programmes called "Tasks".

Benefits for India:

- Shared costs and pooled technical resources.
- The duplication of efforts is avoided and national Research and Development capabilities
 are strengthened. 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.
- 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.

BILATERAL SWAP ARRANGEMENT SIGNED BETWEEN RBI AND BANK OF JAPAN

GS 2:IR | Agreements involving India and/or affecting India's interests

Prelims Level: Bilateral Swap Arrangement

Mains Level: Initiatives taken for stabilising the country's balance of payments (BoP)

Why in News?

- Reserve Bank of India (RBI) and Bank of Japan has signed a Bilateral Swap Agreement.
- The agreement was negotiated during the visit of Prime Minister Narendra Modi to Tokyo last year.

Bilateral Swap Agreement:

- The Swap agreement will provide India access to 75 billion US dollars against the 50 billion US Dollars under earlier BSA.
- Under the agreement, India can access 75 billion US Dollars for its domestic currency, for the purpose of maintaining an appropriate level of balance of payments or short-term liquidity at its discretion.
- Currently, India has a comfortable level of foreign exchange.
- The bilateral swap agreement will provide India to access the reserves if at any point of time when the need arises. As part of the agreement, the Bank of Japan (Japanese central bank) will accept Rupees and give US Dollars to the Reserve Bank of India (RBI).
- Similarly, RBI will take the Yen and give US Dollars to the Bank of Japan to stabilize each other's currency.
- Since the Japanese Yen is one of the five currencies included in the IMF's SDR basket and
 is counted as global hard currency, the central part of the agreement boils down to
 Japanese commitment to exchange US Dollar for Rupee from India.

Benefits of the Swap Agreement:

The currency swap makes it easier to improve liquidity conditions.

- Currency swap agreements help in saving for a rainy day when the economy is not looking in good shape.
- The swap agreements also contribute towards stabilising the country's balance of payments (BoP) position. The agreement aids in improving confidence in the Indian market.

INDIA, RUSSIA TO INK NUCLEAR SUBMARINE DEAL

GS 3: Internal Security

Prelims Level: Nuclear Submarine deal & Particulars

Why in News?

India is set to sign a \$3-billion deal with Russia.

Highlights:

- The intergovernmental agreement for the submarine lease is likely to be inked on March 7
- **Akula class submarine** dubbed Chakra III the vessel will be ready by 2025 after an extensive building programme on mothballed hulls at a Russian shipyard.
- The **Chakra III** will be in service for at least 10 years and will replace the Chakra II that was obtained under similar conditions in 2012.
- It is believed that the lease of the Chakra II, which is to expire in 2022, could be extended for a five-year period till the new vessel gets built and tested.

Background:

- This will be the third Russian nuclear submarine to be operated by India, starting from 1988 when the original INS Chakra was taken on a three-year lease.
- The second was inducted in 2012 after a prolonged refit that saw a time delay.
- The Akula submarines are considered to be next only to newer US nuclear submarines when it comes to stealth and attack capabilities.

MAINAMATI MAITREE EXERCISE 2019 CONCLUDED BETWEEN INDIAN BSF AND BGB

GS 3: Internal Security

Prelims Level: Mainamati Maitree Exercise

Why in News?

 Indian Border Security Force (BSF) and Border Guards Bangladesh (BGB) concluded a three-day Mainamati Maitree Exercise 2019 as a part of confidence-building measures between the two border guards.

Mainamati Maitree Exercise 2019:

- The exercise was named after Mainamati hill range situated 8 km west of Comilla Township in Bangladesh, which is home to an ancient Buddhist archaeological site in the region.
- The exercise was held in areas near Srimantapur in Sipahijala district, bordering Comilla district in Bangladesh.
- The objective of Mainamati Maitree Exercise 2019 was to plan and conduct anti-smuggling and anti-criminal activity related operations with an aim to achieve better joint operational efficiency and border management in the area.
- The exercise involved joint patrolling, anti-smuggling drills, and simulated raids on suspected places in both the countries and checking of goods and identity at international check posts.
- After the Standoff between the Border Security Force (BSF) and Border Guards
 Bangladesh (BGB) around 31 Rohingya people who were were found crossing the
 international border into Bangladesh in January, series of joint exercises and exchanges are
 being held in the Tripura-Bangla frontier as part of the confidence-building measure.

INDO-PACIFIC REGIONAL DIALOGUE - 2019

GS 2: IR | Bilateral, regional & global groupings & agreements involving India &/or affecting India's interests

Prelims level: Indo-Pacific Regional Dialogue - 2019

Why in News?

 The second edition of Indo-Pacific Regional Dialogue (IPRD) – 2019 was recently held in New Delhi.

Objective:

- The annual dialogue aim to provide:
 - ✓ A platform for substantive and insightful discussions pertaining to the geopolitical developments affecting the maritime domain of the Indo-Pacific
 - ✓ Policy-relevant inputs to the policy-makers and the public at large

Indo-Pacific Regional Dialogue (IPRD):

 The idea of an IPRD was first conceptualized and conducted in 2018, as the apex level conference of the Indian Navy, organised by the National Maritime Foundation as the Navy's Knowledge Partner.

- Practical solutions for achieving cohesion in the region through maritime connectivity
- Measures to attain and maintain a free-and-open Indo-Pacific
- A regional approach to the region's transition from a 'Brown' to a 'Blue' economy
- Opportunities and challenges arising from the maritime impact of 'Industry 4.0' and
- How the twin conceptualizations of 'SAGAR' and 'SAGARMALA' might best be made mutually-reinforcing on a regional level

BOLD-QIT PROJECT

GS 3: Internal Security | Security challenges & their management in border areas Prelims level: BOLD-QIT Project

Why in News?

• The Union Home Ministry will inaugurate the project BOLD-QIT (Border Electronically Dominated QRT Interception Technique) under CIBMS (Comprehensive Integrated Border Management system) on India-Bangladesh border in Dhubri District of Assam.

Significance of the project:

• The implementation of this project will not only help BSF to curb all type of cross border crimes but also provide respite to the troops from round the clock human surveillance.

Highlights:

- BOLD-QIT is the project to install technical systems under the Comprehensive Integrated Border Management System (CIBMS).
- It enables BSF to equip Indo-Bangla borders with different kind of sensors in unfenced riverine area of Brahmaputra and its tributaries.
- The entire span of River Brahmaputra has been covered with data network generated by Microwave communication, OFC Cables, DMR Communication, day and night surveillance Cameras and intrusion detection system.
- These modern gadgets provide feeds to BSF Control Rooms on the Border and enable BSF
 Quick Reaction Teams to thwart any possibility of Illegal Cross Border Crossing/ Crimes.

Background:

 The 61 Kms of Border area in District Dhubri, Assam where River Brahmaputra enters into Bangladesh is consisting of vast char lands and innumerable river channels thus making border guarding in this area, a daunting task especially during rainy season.

GENERALIZED SYSTEM OF PREFERENCES (GSP) PROGRAMME

GS 2: IR | Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

Prelims Level: GSP Programme

Why in News?

• U.S. President has announced that he intends to end preferential trade terms for India under the Generalized System of Preferences (GSP) programme.

GSP programme:

- The GSP programme, which sets zero tariffs for certain goods from a set of 121 developing countries to foster their trade and economic development, accounts for some \$5.6 billion of India's exports to the U.S., making India the largest GSP beneficiary.
- Chemicals, gems and jewellery, engineering and textiles are among the Indian industrial sectors that benefit from the GSP.

The discretionary criteria:

One of the discretionary criteria the President must (as per the GSP statute) take into
account while determining GSP eligibility is whether the beneficiary "will provide
equitable and reasonable access to its markets and basic commodity resources and the
extent to which it has assured the United States it will refrain from engaging in
unreasonable export practices."

Challenges faced by U.S.A:

- India's new e-commerce rules which have impacted American companies like Amazon and Walmart (majority owner of Flipkart).
- Price controls on medical devices (cardiac stents).
- Tariffs on ICT products like smart watches and high-end mobile phones
- Lack of greater market access for the U.S. dairy industry

India's measures:

- Indian Oil Corporation announced a \$1.5 billion deal to purchase oil from the U.S. until March 2020.
- Indian officials have been quick to bring up the declining trade surplus (over just over \$21 billion) that India has with the U.S.
- India and the U.S. have been in focused trade talks since Washington imposed tariffs on steel and aluminium early last year, ostensibly on grounds of national security.

AK-203 RIFLE MANUFACTURING UNIT

GS 3: Internal Security

Why in News?

• Prime Minister Narendra Modi laid the foundation stone for AK-203 rifles manufacturing unit in Amethi, Uttar Pradesh.

Highlights:

- On the occasion of laying the foundation stone, PM Modi thanked Russian President Vladimir Putin for making the venture possible in such a short time.
- The message of the Russian President Vladimir Putin was read out by Defence Minister Nirmala Sitharaman on the occasion.

AK-203 Rifle Manufacturing Unit:

- The rifles will be manufactured in Amethi as a joint venture between India and Russia.
- In the Amethi Manufacturing facility, world-famous Kalashnikov assault rifles of the newest 200 series would be manufactured.
- This unit envisions full localisation of production over a period of time.
- This new Kalashnikov assault rifles will fulfil the needs of national security agencies in this category of small arms, resting upon advanced Russian technologies.
- The agreement for the joint venture was reached during the visit of President Putin to India last October.
- The rifle manufacturing unit in Amethi symbolises the military and technical cooperation between India and Russia which has been the key areas of the strategic partnership between Russia and India.

Kalashnikov Rifles:

- Kalashnikov Rifles were developed in the Soviet Union by Mikhail Kalashnikov.
- The rifles were officially accepted by the Soviet Armed Forces in the year 1949.
- Even after seven decades, the model and its variants remain the most popular and widely
 used assault rifles in the world because of their substantial reliability under harsh
 conditions, low production costs compared to contemporary Western weapons,
 availability in virtually every geographic region and ease of use.

PINAKA GUIDED WEAPONS SYSTEM

GS 3: Internal Security

Prelims level: Pinaka Guided Weapons System

Why in News?

• Defence Research and Defence Organisation (DRDO) successfully test fired the Guided PINAKA from Pokhran ranges.

Highlights:

- The successful test trial gives a boost to the artillery capability of the Indian Army.
- Pinaka Guided Weapon System is equipped with a guidance kit comprising an advanced navigation and control system.
- In both the missions, the weapon systems impacted the intended targets with high precision and achieved desired accuracies.
- Telemetry Systems tracked and monitored the vehicle all through the flight path. All the mission objectives have been met.

Pinaka Guided Weapons System:

- Pinaka rocket systems are developed by Defence Research and Development Organisation (DRDO). The rocket system is named after Pinaka, the bow of Lord Shiva.
- Pinaka was initially a 30 to 40 km range rocket. Its range was increased 70 to 80 km with Pinaka Mark II. Multi-Barrel Rocket System PINAKA, an area weapon system to supplement the existing artillery gun at ranges beyond 30 kms, having quick reaction time and high rate of fire has been accepted by the user after extensive trials.
- Pinaka rockets were used in the Kargil War with Pakistan.
- With the increased range there came a need for a more accuracy.
- To fulfil this requirement guided version of the Pinaka is being developed by DRDO.

DRDO DEVELOPS A RANGE OF COMBAT CASUALTY DRUGS

GS 3: Science & Technology | Defence

Prelims Level: Combat Casualty Drugs

Why in News?

 The Defence Research and Development Organisation (DRDO) has developed a range of Combat Casualty Drugs that can extend the 'golden hour' till the trooper is shifted to hospital. This range of drugs can bring down the death toll during the unfortunate instances like the recent Pulwama Terrorist Attack.

Aim of Combat Casualty Drugs:

 These ranges of casualty drugs are aimed at enhancing the chances of survival and minimum disability by providing effective first aid care which is given within the golden hour.

Combat Casualty Drugs:

- The spectrum includes bleeding wound sealants, super absorptive dressings and glycerinated salines, all of which can save lives in the event of warfare in jungle and high-altitude areas as well as in terror attacks.
- These medicines ensure that soldiers do not suffer from unwanted blood loss while being taken to better healthcare from war zones.
- Glycerated saline is a battlefield intravenous fluid that do not freeze till -18 degrees Celsius and is useful in handling trauma cases in high altitudes.
- Glycerated saline has life-saving capacities as it gives more time to the medical personnel to shift the wounded patient to a higher care facility.

NATIONAL KNOWLEDGE NETWORK

GS 2: IR | Bilateral Relations

Prelims Level: National Knowledge Network

Why in News?

• India has extended its National Knowledge Network (NKN) to Bangladesh.

NKN:

- It is is a multi-gigabit pan-India network which facilitates the development of India's communications infrastructure, stimulates research and creates next generation applications and services.
- **Aim:** To connect all universities, research institutions, libraries, laboratories, healthcare and agricultural institutions across the country to address such paradigm shift.

Role of NKN:

- Connecting all higher centres of learning and research by bringing together all stakeholders from science, technology, higher education, healthcare, agriculture and governance to a common platform.
- To optimally utilise the potential of institutions engaged in generation and dissemination of knowledge in various areas, such as research laboratories, universities and other

- institutions of higher learning, including professional institutions, it is important to connect them through a high-speed broadband network.
- To build quality institutions with requisite research facilities and create a pool of highly trained persons.

INDO-OMAN JOINT EX AL NAGAH 2019

GS 2: IR | Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests

Prelims level: Ex Al Nagah

Why in News?

• Indo Oman Joint Exercise Al Nagah III 2019, a joint military exercise between Indian and Royal Army of Oman (RAO), commenced at HQ Jabel Regiment, Nizwa, Oman.

Ex Al Nagah:

- The Omani contingent was represented by Jabel Regiment of the RAO while the Indian side was represented by troops of Tenth Battalion the Garhwal Rifles Regiment.
- Both sides will jointly train, plan and execute a series of well-developed tactical drills for neutralization of likely threats that may be encountered.
- Experts from both sides will also hold detailed discussions to share their experience on varied topics for mutual benefit.
- Ex Al Nagah 2019 will contribute immensely in developing mutual understanding and respect for each other's military as also facilitate in tackling the worldwide phenomenon of terrorism.

INDIA GETS FIRST TIR SHIPMENT VIA CHABAHAR PORT FROM AFGHANISTAN

GS 2:IR | Agreements involving India and/or affecting India's interests

Prelims level: TIR Convention

Mains level: Significance of Chabahar Port

Why in News?

• The first shipment under the United Nations 'Transports Internationaux Routiers' (TIR) convention has arrived in India from Afghanistan through the Chabahar Port of Iran.

'Transports Internationaux Routiers' Convention:

• The Transports Internationaux Routiers is an international Convention aimed at harmonising the administrative formalities of international road transport.

- The goods being moved through the TIR convention requires the goods to be outlined in a
 TIR carnet and sealed in load compartments.
- The customs officials only verify the carnet and check the seal without requiring physical checking of the contents.
- This enables shipments to pass through countries without being opened at borders.
- Reciprocal recognition of customs controls is at the heart of the TIR Convention.
- The convention enables a facilitative and non-intrusive environment for multi-modal transport of goods through several countries.
- India joined the TIR Convention in 2017.

Significance:

- The convention acts as a strong catalyst for moving goods using the multi-modal transportation route like Chabahar and International North-South Transport (INSTC)
 Corridor. The convention offers a great opportunity for the landlocked countries by providing seamless border crossing facilitation and intermodal capabilities.
- The convention further aids in the implementation of the Trade facilitation agreement of the World Trade Organisation.

WHO STRATEGY TO FIGHT FLU PANDEMICS

GS 2: IR | Important International institutions

Prelims Level: Global Influenza Strategy

Why in News?

 The World Health Organization has launched a strategy to protect people worldwide over the next decade against the threat of influenza, warning that new pandemics are "inevitable".

Global Influenza Strategy for 2019-2030:

- It aims to:
 - ✓ Build stronger country capacities for disease surveillance and response, prevention and control, and preparedness.
 - ✓ To achieve this, it calls for every country to have a tailored influenza programme that contributes to national and global preparedness and health security.
 - ✓ Develop better tools to prevent, detect, control and treat influenza, such as more effective vaccines, antivirals, and treatments, with the goal of making these accessible for all countries.

Influenza epidemics:

- WHO's new strategy, for 2019 through 2030, aims to prevent seasonal influenza, control the virus's spread from animals to humans and prepare for the next pandemic.
- The new strategy called for every country to strengthen routine health programmes and to develop tailor-made influenza programmes that strengthen disease surveillance, response, prevention, control, and preparedness. Influenza epidemics, largely seasonal, affect around one billion people and kill hundreds of thousands annually.

Recommendations:

- WHO recommends annual flu vaccines as the most effective way to prevent the spread of
 the disease, especially for healthcare workers and people at higher risk of influenza
 complications. It also called for the development of more effective and more accessible
 vaccines and antiviral treatments.
- Due to its mutating strains, vaccine formulas must be regularly updated and only offer limited protection currently.

FOURTH SESSION OF THE UN ENVIRONMENT ASSEMBLY

GS 2:IR | Important International institutions

Prelims Level: UN Environment Assembly

Why in News?

 The fourth session of the UN Environment Assembly (UNEA-4) took place in Nairobi, Kenya. Theme of the fourth Session: Innovative Solutions for Environmental Challenges and Sustainable Consumption and Production'.

Why this resolution is important?

- The global nitrogen use efficiency is low, resulting in pollution by reactive nitrogen which threatens human health, eco system services, contributes to climate change and stratospheric ozone depletion.
- Only a small proportion of the plastics produced globally are recycled with most of it damaging the environment and aquatic bio-diversity.
- Both these are global challenges and the resolutions piloted by India at the UNEA are vital first steps towards addressing these issues and attracting focus of the global community.

Highlights:

• The key features of an innovative culture are creativity, openness and participation.

- The 2019 UN Environment Assembly will contribute towards a holistic, inclusive, and
 participatory approach to development that is underpinned by human rights and
 recognizes the interlinkages and integrated nature of the 2030 Agenda and the Sustainable
 Development.
- The 2019 UN Environment Assembly will address the following three focus areas:
 - ✓ **Environmental challenges** related to poverty and natural resources management, including sustainable food systems, food security and halting biodiversity loss;
 - ✓ **Life-cycle approaches** to resource efficiency, energy, chemicals and waste management; and **Innovative sustainable business development** at a time of rapid technological change.

United Nations Environment Assembly:

- The United Nations Environment Assembly is the world's highest-level decision-making body on the environment. It addresses the critical environmental challenges facing the world today. Understanding these challenges and preserving and rehabilitating our environment is at the heart of the 2030 Agenda for Sustainable Development.
- The Environment Assembly meets biennially to set priorities for global environmental policies and develop international environmental law.
- Through its resolutions and calls to action, the Assembly provides leadership and catalyses intergovernmental action on the environment.
- Decision-making requires broad participation, which is why the Assembly provides an opportunity for all peoples to help design solutions for our planet's health.

TROPEX 2019

GS 3: Internal Security

Prelims level: Theatre Level Operational Readiness Exercise (TROPEX 19).

Why in News?

 Chief of the Naval Staff will be in Kochi to preside over the debriefing of the largest War Game of the Indian Navy - the Theatre Level Operational Readiness Exercise (TROPEX 19).

Highlights:

Chief of the Naval Staff with all Operational Commander's is intended to examine the
conduct of the exercise and to assess the operational preparedness of the Indian Navy. The
lessons learnt from the exercise will provide the planners accurate assessments to fine-

tune force structuring requirements, operational logistics, as also material and training imperatives

- The exercise had commenced 07 Jan 19 and was planned to be terminated by 10 Mar 19.
 However, the JEM sponsored terrorist attack on the CRPF convoy in Pulwama on 14 Feb
 19 led to the rapid redeployment of the Indian Navy for Operations in North Arabian Sea.
- A clear and resolute message regarding the operational posture of the Indian Navy to prevent, deter and defeat any misadventure by Pakistan in the maritime domain was also issued during the tri-services press conference conducted on 28 Feb 19.
- About 60 ships of the Indian Navy, 12 ships of the Indian Coast Guard and 60 aircraft were part of TROPEX 19. Amongst the key attributes of Naval forces are the 'Versatility' to change roles, 'Mobility' and 'Poise'. Availability of such a large number of combat-ready assets in the theatre of operations for TROPEX 19 allowed the Indian Navy to expeditiously respond to the developing situation in synergy with the three services. The overwhelming superiority of Indian Navy in all three dimensions forced the Pakistan Navy to remain deployed close to the Makran coast and not venture out in the open ocean.

TROPEX 19:

- TROPEX 19 had commenced with Tri-services Amphibious Exercise in the A & N islands with participation of Army and Air Force.
- This was followed by the largest Coastal Defence Exercise code-named SEA VIGIL with participation of all 13 Coastal States and Union Territories along with all maritime stakeholders. The TROPEX itself was thus far the largest in terms of geographical spread covering the IOR (Indian Ocean region) and also with regard to the number of participating units.

AFINDEX-19

GS 2:IR | India - Africa relations

Prelims level: Africa-India Field Training Exercise-2019

Why in News?

 Africa-India Field Training Exercise-2019 for India and African nations called AFINDEX-19 started at Aundh Military Station, Pune.

Highlights:

Contingents of the 17 African Nationse. Benin, Botswana, Egypt, Ghana, Kenya,
 Mauritius, Mozambique, Namibia, Niger, Nigeria, Senegal, South Africa, Sudan, Tanzania,

Uganda, Zambia and Zimbabwe came together for the opening ceremony along with a contingent of Maratha Light Infantry representing India.

Aim and objective of exercise:

- The aim of the exercise is to practice the participating nations in planning and conduct of Humanitarian Mine Assistance and Peace Keeping Operations under Chapter VII of United Nations Peace Keeping Operations.
- The exercise will focus on exchange of best practices between the participating nations, team building and tactical level operations in conduct of United Nations mandated tasks to include establishment of a new mission, siting of a United Nations Headquarters for Peace Keeping operations, siting of Military Observer sites during the peace keeping missions, protection of civilians, nuances of standing combat deployment, convoy protection, patrolling aspects and aspects related to Humanitarian Mine Assistance.

Chapter VII of the United Nations Charter:

Chapter VII of the United Nations Charter sets out the UN Security Council's powers to
maintain peace. It allows the Council to "determine the existence of any threat to the
peace, breach of the peace, or act of aggression" and to take military and non-military
action to "restore international peace and security".

INDIA-INDONESIA COORDINATED PATROL (IND-INDO CORPAT)

GS 3: Internal Security

Prelims level: Ind-Indo Corpat Exercise

Why in News?

 Indonesian Naval Ship KRI Sultan Thaha Syaifuddin and Maritime Patrol Aircraft CN-235 arrived at Port Blair, Andaman & Nicobar Islands, India for the Opening Ceremony of the 33rd edition of the India-Indonesia Coordinated Patrol (IND-INDO CORPAT).

Highlights:

- The IND-INDO CORPAT Series of bilateral seek to underscore India's peaceful presence
 and solidarity with friendly Maritime neighbours countries to ensure good order in the
 maritime domain, consolidate interoperability and strengthen existing bonds of friendship
 between India and Indonesia.
- During the stay in Port Blair harbour, various activities such as official calls, formal reception on board ship, sporting fixtures between both navies, ship open to visitors and professional interactions have been planned.

Role of the Indian Navy in IOR:

- Indian Naval assets have been increasingly deployed in recent times to address the maritime concerns on the region.
- In addition, as part of the Indian Government's vision of SAGAR (Security and Growth for All in the Region), the Indian Navy has also been involved in assisting countries in the Indian Ocean Region with EEZ Surveillance, Search and Rescue, and other capacitybuilding and capability-enhancement activities.
- The 33rdIND-INDO CORPAT, also coinciding with 70 years of India-Indonesia diplomatic ties, will contribute towards the Indian Navy's efforts to consolidate inter-operability and forge strong bonds of friendship across the seas.

INDIA, US TO SIGN PACT FOR EXCHANGE OF COUNTRY-BY-COUNTRY REPORTS

GS 2:IR | Effect of policies and politics of developed and developing countries on India's interests, Indian Diaspora.

Prelims level: CBC reports

Mains level: India - US relations

Why in News?

• India and the US can now exchange country-by-country (CbC) reports filed by the ultimate parent corporations based in either of the countries. This will reduce the compliance burden on their subsidiaries operating out of these countries.

CBC reports:

- The Income Tax Act requires Indian subsidiaries of multinational companies to provide details of key financial statements from other jurisdictions where they operate.
- This provides the IT department with better operational view of such companies, primarily with regards to revenue and income tax paid.
- The objective of mandating CbC is to ensure that all relevant tax authorities have access to the same information about an MNC's value chain and the resulting tax consequences.
- The provision was a part of the base erosion and profit shifting action plan, and later incorporated in IT Act also.

Highlights:

As per the Income-tax Act, a constituent entity of an international group, resident in India,
 other than a parent entity or an alternate reporting entity of an international group,

resident in India, shall furnish the Country-by-Country (CbC) Report for a accounting year within the period as may be prescribed, if the parent entity of the said International Group is resident of a country or territory:

- ✓ Where the parent entity is not obligated to file the CbC Report
- ✓ With which India does not have an agreement providing for exchange of the CbC Report OR
- ✓ Where there has been a systemic failure of the country or territory and the said failure has been intimated by the prescribed authority to such constituent entity
- With this, Indian constituent entities of international groups headquartered in USA, who
 have already filed CbC Reports in the USA, would not be required to do local filing of the
 CbC Reports of their international groups in India.

US WILL RECOGNIZE ISRAEL'S SOVEREIGNTY OVER GOLAN HEIGHTS

GS 2: IR | Effect of policies & politics of developed & developing countries on India's interests

Prelims level: Golan Heights

Why in News?

- US President Trump has announced that the US will recognize Israel's sovereignty over the Golan Heights.
- This is a departure from the earlier stand of US where it treated Golan Heights as occupied Syrian territory, in line with United Nations Security Council (UNSC) resolutions.

Dispute over Golan Heights:

- Until 1967, Golan Heights was part of Syria. Israel occupied the Golan Heights during the Six Day war (Third Arab Israeli war) held in 1967.
- Israel annexed the region unilaterally in 1981.
- This unilateral annexation was not recognised by the international community and the Golan Heights was seen as Occupied Syrian Territory.
- Syria tried to regain the Heights in the 1973 Middle East war but was thwarted.
- Israel and Syria signed an armistice in 1974 and the Golan had been relatively quiet since.
- In 2000, Israel and Syria held their highest-level talks over a possible return of the Golan and a peace agreement.
- But the negotiations collapsed and subsequent talks also failed.

Why Israel wants Golan Heights?

• Israel argues that civil war in Syria demonstrates the need to keep the plateau as a buffer

zone between Israeli towns and the instability of its neighbour.

Israel also fears that Iran is seeking to establish itself permanently on the Syrian side of the

border in order to launch attacks on Israel. Golan's water resources and naturally fertile

soil, with the volcanic soil being used to cultivate vineyards and orchards and to raise

cattle.

Syrian stance on Golan:

• Before the outbreak of the civil war in Syria in 2011, there was an uneasy stand-off

between Israeli and Syrian forces loyal to Assad. But in 2014 anti-government Islamist

rebels overran Quneitra province on the Syrian side.

• The rebels forced Assad's forces to withdraw and also turned on US forces in the area,

forcing them to pull back from some of their positions.

• The area remained under rebel control until the summer of 2018, when Assad's forces

returned to the largely ruined city of Quneitra and the surrounding area following a

Russian-backed offensive and a deal that allowed rebels to withdraw.

What is the current situation?

• United Nations Disengagement Observer Force (UNDOF) is stationed in camps and

observation posts along the Golan.

• There is a 400-square-km (155-square-mile) "Area of Separation" called a demilitarized

zone between the Israeli and Syrian armies. Further, Separation of Forces Agreement of

May 31, 1974, created an Alpha Line to the west of the area of separation, behind which

Israeli military forces must remain and a Bravo Line to the east behind which Syrian

military forces must remain. 25 km beyond the "Area of Separation" on both sides is an

"Area of Limitation" in which there are restrictions on the number of troops and kinds of

weapons that both sides can have there.

WORLD TUBERCULOSIS DAY

GS 2: IR | International Events

Prelims level: World Tuberculosis Day

Why in News?

• World Tuberculosis Day is observed every year on 24th March, to commemorate the

anniversary of Dr. Robert Koch's discovery of the Tuberculosis (TB) bacteria in 1882.

THEME -2019:

• The theme of World Tuberculosis Day this year is "It's Time".

• Consistent with the spirit of this theme, India has renewed its commitments and intentions

to end TB by 2025, five years ahead of the global targets. This is an ambitious timeline and,

given our motivation to eliminate the disease, it is achievable.

Highlights:

• TB remains the world's deadliest infectious killer. Each day, nearly 4500 people lose their

lives to TB and close to 30,000 people fall ill with this preventable and curable disease.

Global efforts to combat TB have saved an estimated 54 million lives since the year 2000

and reduced the TB mortality rate by 42%. To accelerate the TB response in countries to

reach targets - Heads of State came together and made strong commitments to end TB at

the first-ever UN High Level Meeting in September 2018.

Tuberculosis (TB):

• Tuberculosis (TB) is caused by bacteria (Mycobacterium tuberculosis) that most often

affect the lungs.

• Tuberculosis is curable and preventable. TB is spread from person to person through the

air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the

air. A person needs to inhale only a few of these germs to become infected.

Latent TB and active TB:

• Latent TB: In this condition, you have a TB infection, but the bacteria remain in your body

in an inactive state and cause no symptoms. Latent TB, also called inactive TB or TB

infection, isn't contagious.

• It can turn into active TB, so treatment is important for the person with latent TB and to

help control the spread of TB. About one-third of the world's population has latent TB.

• Active TB: This condition makes you sick and, in most cases, can spread to others. It can

occur in the first few weeks after infection with the TB bacteria, or it might occur years

later.

ABHEDYA -NUCLEAR, BIOLOGICAL,

CHEMICAL TRAINING FACILITY

GS 3: Internal Security

Prelims level: ABHEDYA, INS Shivaji

Why in News?

• Admiral Sunil Lanba, Chief of the Naval Staff commissioned a state of the art "Nuclear, Biological, Chemical (NBC) Training Facility – ABHEDYA", at INS Shivaji, Lonavla.

Highlights:

- "Abhedya", Sanskrit for impenetrable, will help train personnel of naval ships fitted with nuclear, biological and chemical detection and protection systems.
- This unique facility will assist Indian Navy in providing realistic simulation of Nuclear,
 Chemical & Biological warfare to its personnel during their NBC damage control training,
 which till now was limited to theoretical training largely.
- This facility has been built by Goa Shipyard Limited. It will help train personnel of naval ships fitted with NBC detection and protection systems.
- It will provide realistic training to naval personnel in detection, protection against and decontamination of NBC agents.
- It will train trainees in detecting, monitoring, surveying and decontaminating areas using actual NBC equipment, providing real time NBC scenarios.

INS Shivaji:

- It is premier Technical Training Establishment of Indian Navy that trains officers and sailors of marine engineering branch and equips them with professional skills and expertise.
- It is located in Lonavala, Maharashtra. It was commissioned in February 1945 as HMIS Shivaji. It is located close to the Bhushi Dam. It is located on 876 acres of land.
- It houses Naval College of Engineering which trains officers of the Indian Navy and Indian Coast Guard. Indian Navy's Center for Marine Engineering Technology and Nuclear, Biological and Chemical Defence (NBCD) School are also based here.
- It is celebrating its platinum jubilee year in 2019-20. The theme this celebration is "Propelling the Indian Navy since 1945".

CH47 Chinook heavy-lift Choppers

GS 3: Internal Security

Prelims level: CH-47 Chinook

Why in News?

• The IAF formally inducted the CH 47 F (I) – Chinook heavy lift helicopters into its inventory at Air Force Station Chandigarh.

Highlights:

- IAF had signed a contract with M/s Boeing Ltd in September 2015 for 15 Chinook helicopters.
- These helicopters will be deployed in the Northern and Eastern regions of India.
- The addition of heavy-lift CH 47 F (I) helicopter is a significant step towards modernisation of Indian Air Force's helicopter fleet.
- The helicopter has been customized to suit IAF's future requirements and capability roadmap. The helicopter has a fully integrated digital cockpit management system, advanced cargo handling capabilities and electronic warfare suite that complement the aircraft's performance. The helicopter is capable of airlifting diverse military and nonmilitary loads into remote locations.

CH-47 Chinook:

- The Boeing CH-47 Chinook is an American twin-engined, tandem rotor, heavy-lift helicopter.
- It is among the heaviest lifting Western helicopters. Its name, Chinook, is from the Native American Chinook people of modern-day Washington state.
- A multi-mission heavy-left transport helicopter, Chinook will be used to move troops, artillery, ammunition, barrier materials, supplies and equipment on the battlefield.
- It is highly maneuverable, which makes it suitable for operating in tough, dense terrain.
- Its 24X7, all-weather operational capabilities are crucial for India Air Force, which operates in some of the most hostile terrains in the world.
- Apart from military operations, they can also be used for medical evacuation, disaster relief, search and recovery, fire-fighting and civil development.
- It is capable of transporting fully-equipped infantry soldiers for specialised operations. It has fully integrated digital cockpit management system.
- The Chinook has the capacity to carry a maximum payload capacity of 11 tonnes and 45 troops.

AUSINDEX 2019

Prelims level: AUSINDEX 2019

Why in News?

• Third Installment of the Joint Naval Exercise of India and Australia- AUSINDEX will be held off the coast of Vishakhapatnam from April 2 to 16.

• The joint exercise will focus on anti-submarine warfare, as part of efforts to ramp up bilateral naval cooperation in the strategic Indian Ocean region.

AUSINDEX 2019:

- AUSINDEX 2019 will be held off the coast of Vishakhapatnam from April 2 to 16.
- From the Australian side, HMAS Canberra (landing helicopter dock), Auxiliary Oiler Replenishment vessel, two frigates - HMAS Newcastle and HMAS Parramatta and P8I and P8 maritime patrol aircraft will be involved in the exercise.
- A Kilo-class submarine, land-based Hawk aircraft that will provide the air attack element
 for the exercise, a Kamorta class anti-submarine vessel, besides a stealth destroyer will
 lead the Indian deployment for the exercise.
- The exercise will feature the deployment of Australian personnel on Indian ships and vice versa. The area of the exercise will be within 200 miles of Vishakhapatnam.
- AUSINDEX 2019 will also witness the largest ever deployment of an Australian defence group to India, over 1000 Australian defence personnel will take part.
- To further strengthen the defence cooperation between India and Australia, Australia has also proposed logistics sharing pact with India.

WORLD FOOD PROGRAMME

GS 2: IR | International Institutions

Why in News?

- Japan has donated 69 million dollars to the United Nations World Food Programme to provide vital aid to 28 countries in the Middle East, Africa, and Asia, with the biggest shares of the money earmarked for Yemen and Iraq.
- Japan is one of WFP's top donors and has contributed \$\$958 million to the UN agency since 2014.

World Food Programme:

- The World Food Programme (WFP) is the food-assistance branch of the United Nations
 and the world's largest humanitarian organization addressing hunger and promoting food
 security. From its headquarters in Rome and from more than 80 country offices around the
 world, the WFP works to help people who cannot produce or obtain enough food for
 themselves and their families.
- It is a member of the United Nations Development Group and part of its executive committee.

• WFP has been working in India since 1963, with work transitioning from food distribution to technical assistance since the country achieved self-sufficiency in cereal production.

LANGKAWI INTERNATIONAL MARITIME AND AEROSPACE EXHIBITION (LIMA)

GS 2: IR | Bilateral, regional & global groupings & agreements involving India &/or affecting India's interests

Prelims level: LIMA, INS Kadamatt

Why in News?

- Indian Air Force is participating in the Expo for the first time and it will showcase its indigenously developed LCA fighter aircraft.
- INS Kadmatt participated in numerous activities planned as part of LIMA.

LIMA:

- It is a maritime and aerospace exhibition that takes place once every two years in Langkawi, Malaysia.
- The event is one of the largest maritime and aerospace exhibitions in the Asia-Pacific, and is focused mainly on the defence industry.

INS Kadamatt:

- INS Kadmatt (P 29) is an indigenous stealth anti-submarine warfare corvette and was commissioned into the Indian Navy in January 2016.
- The ship is fitted with state-of-the-art weapons, sensors and machinery and is also designed to embark the Seaking anti-submarine helicopter.
- The ship would participate in numerous activities planned as part of LIMA 19 for seven days at Langkawi, including the International Fleet Review (IFR) by the Prime Minister of Malaysia, maritime and air demonstration, and sea exercises with 29 other participating navies.

Significance:

- Participation of Indian Air Force in LIMA 2019 will provide an opportunity to airwarriors to interact with their Royal Malaysian Air Force counterparts and foster close relationship between the two services.
- This will also serve as a foundation for any future interaction with the Malaysian Air Force.

SHARDA PEETH CORRIDOR

GS 2: IR | India & its neighborhood-relations

Prelims level: Sharda Peeth Corridor

Why in News?

- The Pakistan government has approved a proposal to establish a corridor that will allow Hindu pilgrims from India to visit Sharda Peeth an ancient Hindu temple and cultural site in POK.
- India had already sent a proposal to Pakistan to open the temple corridor.
- The corridor when opened will be the second religious tract after Kartarpur corridor in Pakistan-controlled territory that will connect the two neighbouring nations.

Sharda Peeth Corridor:

- Established in 237 BC during the reign of Ashoka, the 5,000-year-old Sharada Peeth is an abandoned temple and ancient centre of learning dedicated to the Hindu goddess of learning.
- Between the 6th and 12th centuries CE, Sharada Peeth was one of the foremost temple universities of the Indian subcontinent.
- After Partition in 1947, the temple went under the control of Pakistan.
- It is about 150km from Muzaffarabad, the capital of PoK, and about 130km from Srinagar,
 the summer capital of Jammu & Kashmir.
- It is also one of the three famous holy sites for Kashmiri Pandits, the other two being the Martand Sun Temple in Anantnag and the Amarnath temple.
- Kashmiri Pandit organisations have been demanding opening of the Sharda Peeth corridor for many years now.

Significance of the peeth:

- The peeth is also considered a historical seat of learning, and was once at par with the ancient seats of learning at Nalanda and Takshila.
- Kashmiri Pandits consider Sharada as their "kuldevi" or principal deity.
- The Sharada Peeth is believed to be one of the foremost temple universities of the subcontinent between the 6th and 12th centuries CE.
- There are competing theories about when it was built, but it has been suggested that the temple is over 5,000-year-old.

MOU ON COMBATING ILLICIT TRAFFICKING IN NARCOTIC DRUGS

GS 2: IR | Bilateral, regional & global groupings & agreements involving India &/or affecting

India's interests

Prelims level: Particulars of the MoU

Why in News?

The Union Cabinet has approved the signing of Memorandum of Understanding (MoU) between India and Indonesia on combating illicit trafficking in narcotic drugs,

psychotropic substances and its precursors.

Highlights of the MoU:

The MoU shall facilitate and enhance the cooperation between the two countries in combating illicit trafficking of narcotic drugs, psychotropic substances and its precursors

as defined by the United Nations International Drug Control Conventions.

The cooperation under this MoU includes:

✓ the exchange of information on existing legal instruments of national legislation of

both countries in combating the illicit trafficking of narcotic drugs, psychotropic

substances and its precursors, allowing and assisting each other in the use of

controlled delivery operation with a view to identifying persons involved in illicit

trafficking in narcotic drugs, psychotropic substances and its precursors and essential

chemicals, prevention of money laundering.

Under the MoU, there is a provision of maintaining the secrecy of information and

documents obtained in accordance with this MoU.

Significance:

The MoU will help in mutual cooperation in the regulation of narcotic drugs and

psychotropic substances and in combating drug trafficking.

MOU ON ANTARCTIC COOPERATION BETWEEN INDIA AND

ARGENTINA

GS 2: IR | Bilateral, regional & global groupings & agreements involving India &/or affecting

India's interests

Prelims level: Particulars of the MoU

Why in News?

The Union Cabinet, chaired by the Prime Minister was apprised about an MoU signed in

February, 2019 between India and Argentina on Antarctic cooperation.

Highlights of the MoU:

- Scientific cooperation on projects in the fields involving Earth sciences and life sciences, as
 well as those related to the protection and conservation of the natural environment of
 Antarctica and the Southern Oceans. The exchange of scientific and bibliographical
 information related to the study of Antarctica, its environment and dependent and
 associated ecosystems. Exploring opportunities for exchanges of scientists.
- Participation of scientists and technical experts of the national Antarctic programme of one country in the national Antarctic programme of the other, if so required.
- Joint scientific conferences and workshops; hold bilateral meetings on the sidelines of major polar forum meetings, where feasible.
 - ✓ Joint scientific publications.
 - ✓ Training of scientific personnel.

Significance:

The MoU will help scientific cooperation on projects in the fields of Earth sciences, as well
as those related to the protection and conservation of the natural environment of
Antarctica and the Southern Oceans.

TERROR MONITORING GROUP (TMG)

GS 3: Internal Security

Prelims level: Terror Monitoring Group (TMG)

Why in News?

• The Ministry of Home Affairs (MHA) announced the setting up of a Terror Monitoring Group (TMG) aimed at taking "coordinated action against terror funding.

Highlights:

- To take action against "hard core sympathisers among government employees, including teachers, who are providing covert or overt support" to terror-related activities, the Ministry of Home Affairs has formed a Terror Monitoring Group (TMG).
- The order by Director of Jammu and Kashmir Department in MHA, says that in order to
 ensure synergised and concerted action against terror financing and other related activities
 in Jammu and Kashmir, a multi-disciplinary monitoring group comprising eight members
 has been constituted.

Responsibilities of TMG:

- The TMG has to take coordinated action in all registered cases that relate to terror financing and terror-related activities and bring them to a logical conclusion. It will identify all key persons, including leaders of the organisation(s), who are involved in supporting terrorism in any form and take concerted action against them.
- The TMG will "investigate the networks of various channels being used to fund terror and terror activities and take coordinated action to stop flow of such funds," the order reads.
- The group will meet on a weekly basis and submit action-taken report regularly to the MHA. The TMG will be chaired by Additional Director General of Police, CID of J&K Police, and include Inspector General of Police of J&K and Additional Director of Intelligence Bureau, J&K, as members. It will also have representatives from the Central Bureau of Investigation, National Investigation Agency, Central Board of Direct Taxes and Central Board of Indirect Taxes and Customs.

DHANUSH HOWITZERS ARTILLERY GUNS

GS 3: Internal Security

Why in News?

• Four indigenous Dhanush Howitzer guns were inducted into the Indian Army. The induction of Dhanush Howitzer guns gives major fire-power boost to the Indian Armed Forces.

Dhanush Howitzers Artillery Guns:

- Dhanush Long Range Artillery Guns are the first ever indigenous 155 mm x 45 calibre long-range artillery guns.
- Dhanush Long Range Artillery Guns are equipped with inertial navigation-based sighting system, auto-laying facility, on-board ballistic computation and an advanced day and night direct firing system. The self-propulsion unit on Dhanush allows the gun to negotiate and deploy itself in mountainous terrains with ease.
- Dhanush is also electronically upgraded to enhance firing accuracies, laying speeds of the existing gun and to provide compatibility with various kinds of ammunition as well.
- Dhanush Howitzer is an improved version of Bofors guns acquired by India between 1987 and 1991. Dhanush Howitzer is a reverse-engineered upgraded variant of the original Bofors design.
- Dhanush reportedly has a new maximum effective range of 38 kilometers in salvo mode.

• Dhanush Howitzer is capable of firing eight rounds per minutes and needs a crew of six to eight artillerymen.

BASE EROSION AND PROFIT SHIFTING (BEPS)

GS 2: IR | Effect of policies and politics of developed and developing countries on India's interests

Prelims level: CBC reports, BEPS

Why in News?

• India and the U.S. signed an inter-government agreement for the automatic exchange of country-by-country (CbC) reports. This will reduce the compliance burden for Indian subsidiary companies of U.S. parent companies. This is a key step in making India compliant with the Base Erosion and Profit Shifting (BEPS) project, of which it is an active participant.

BEPS:

- Base Erosion and Profit Shifting (BEPS) is a tax avoidance strategy used by multinational
 companies by exploiting gaps and mismatches in tax rules to artificially shift profits to low
 or no-tax locations. In order to combat this, many countries entered into agreements to
 share tax information with each other to enhance transparency and make such profit
 shifting that much harder.
- Here, profits are shifted from jurisdictions that have high taxes (such as the United States
 and many Western European countries) to jurisdictions that have low (or no) taxes (socalled tax havens). The BEPS Action Plan adopted by the OECD and G20 countries in 2013
 recognised that the way forward to mitigate risk from base erosion and profit shifting was
 to enhance transparency.

CBC Reports:

Against this background, a template was released in 2014, which outlined how MNEs could report the required information for each tax jurisdiction in which they do business. These are called the country-by-country reports. MNEs are also required to identify each entity within the group doing business in a particular tax jurisdiction, and to provide information about the business activities each entity conducts. This information is to be made available to the tax authorities in all jurisdictions in which the MNE operates. This was seen as placing a huge compliance burden on the subsidiary companies of these MNEs.