

# PIB COMPILATION

**AUGUST - 2018**

## 1. INDIAN ECONOMY

- Policy Framework for Exploration and Exploitation of Unconventional Hydrocarbons
- State Energy Efficiency Preparedness Index
- Cabinet Approves Extension of Concessional Financing Scheme (CFS)
- Strategic Investment Fund Under NIIF
- Introduction of E-Way Bill System
- Mobile App NIRYAT Mitra
- Public Sector Banks to Come Out of PCA Framework
- Centre Unveils International UDAN
- India's first ISTS Connected wind Power Project commissioned

## 2. CULTURE

- Heritage Circuit and North East Circuit

## 3. GEOGRAPHY & ENVIRONMENT

- KHANGCHENDZONGA Biosphere Reserve to be included in the world Network of Biosphere Reserves
- PARIVESH - a single window hub Environment Management system
- National wildlife Genetic Resource Bank dedicated to Nation
- India's first Biofuel Flight

## 4. DEFENCE

- India set to Build New Fighter Jet Advanced Medium Combat Aircraft

## 5. INDIAN POLITY / GOVERNANCE

- Homeopathy Central Council Amendment Bill - 2018
- Rajasthan First State to Implement Biofuel Policy
- SEVA BHOJ YOJNA - Scheme

- Vidya Lakshmi Portal for Education Loan
- NITI Aayog Identified 117 Districts as Aspirational Districts for RUSA Scheme
- UMANG
- Access to Andaman Eased
- Swachh Survekshan 2019, ODF+ & ODF ++ protocols and SWACHH MANCH web portal
- Post matric scholarship for other Backward classes students for studying in India
- New central sector scheme for promoting pharmacovigilance of Ayush drugs
- New specific health warning on Tobacco products packs
- International Buddhist conclave 2018
- NCRB to track complaints on sexual violence
- Commerce ministry developing national logistics portal
- POSHAN MAAH (National Nutrition Month)
- Strategic partnership (SP) model - procurement of 111 utility helicopters for the Indian Navy
- Fame India Phase II
- Government Announces regulations for drones
- India Post Payments Bank
- Launch of National mission on GEM

## 6. SCIENCE & TECHNOLOGY

- Ballistic Missile Interceptor AAD Successfully Flight Tested
- India's Moon Mission CHANDRAYAAN-2
- NITI Aayog To Join Hands with CII To Develop A Roadmap For Global Innovation Index
- Successful Flight tests of smart anti airfield weapon (SAAW) and ATGM 'HELINA'
- CHANDRAYAAN-1 Data Confirms Presence of Ice on Moon
- Ocean Services, Technology, Observations, Resources Modelling and Science (O-Smart) Scheme
- ATAL Rankings for Higher Education Institutions

## 7. INTERNATIONAL / INDIAN RELATIONS

- US gives India Strategic trade Authorisation - 1 Status
- Who lauds India's commitment to accelerated sanitation coverage
- Exercise SCO Peace Mission 2018
- Portal G20 Digital Economy Ministerial meeting
- Indian naval ship exercise KAKADU 2018

## INDIAN ECONOMY

### POLICY FRAMEWORK FOR EXPLORATION AND EXPLOITATION OF UNCONVENTIONAL HYDROCARBONS

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

**Prelims level: Policy and Framework / Mains level: Hydrocarbon exploration in India**

#### Why in News?

- Union Cabinet has approved policy framework to permit exploration and exploitation of unconventional hydrocarbons such as Shale oil/gas, Coal Bed Methane (CBM) etc.
- It will be carried out under the existing Production Sharing Contracts (PSCs), CBM contracts and Nomination fields to encourage the existing Contractors in the licensed/leased area to unlock the potential of unconventional hydrocarbons in the existing acreages.

#### Provisions of the new policy:

- The fiscal and contractual terms of the policy provide for ring-fencing of Petroleum Operations and cost recovery of new hydrocarbon discoveries in PSC block.
- Additional 10% rate of Profit Petroleum/ Production Level Payment (PLP) in case of CBM contract, over and above the existing rate of Profit Petroleum/PLP is to be shared with Government on new discoveries.
- For nomination blocks, NOCs will be allowed to explore and exploit unconventional hydrocarbons under the existing fiscal and contractual terms of exploration/lease license.

#### Benefits of this Policy Framework:

- This policy will enable the realization of prospective hydrocarbon reserves in existing contract areas which otherwise would have remain unexplored and unexploited.
- It will give impetus to new investment in exploration and production (E&P) activities and chances of finding new hydrocarbon discoveries and increasing domestic production.
- It will also spur exploration and exploitation of additional hydrocarbon resources giving impetus to new investment, economic activities, additional employment generation and thus benefitting various sections of society.

- This will also lead to induction of new, innovative and cutting-edge technology and forging new technological collaboration to exploit unconventional hydrocarbons.

## Coal Bed Methane:

- Coal Bed Methane (CBM) is an unconventional form of natural gas found in coal deposits or coal seams.
- CMB is formed during the process of coalification, the transformation of plant material into coal.
- It is considered a valuable energy resource with reserves and production having grown nearly every year since 1989. Varied methods of recovery make CBM a stable source of energy.

## Shale Gas:

- Shale gas is a natural gas formed from being trapped within shale formations. It is unconventional source of methane, like coal-bed gas (in coal seams) and tight gas (trapped in rock formations).
- It is colourless, odourless gas, lighter than air. It is cheaper than natural gas, releases 50% less CO<sub>2</sub>, hence better source for generating electricity.
- It also provides feedstock for petrochemicals industry, which is turned into fertilizer, plastics and other useful stuff.

## STATE ENERGY EFFICIENCY PREPAREDNESS INDEX

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

**Prelims: State Energy Efficiency Preparedness Index - Highlights. / Mains: Energy efficiency-needs significance and government efforts.**

## Why in News?

- Bureau of Energy Efficiency (BEE) and Alliance for an Energy Efficient Economy (AEEE) have jointly released the 'State Energy Efficiency Preparedness Index'.

## State Energy Efficiency Preparedness Index:

- Bureau of Energy Efficiency (BEE) and Alliance for an Energy Efficient Economy (AEEE) has released the 'State Energy Efficiency Preparedness Index', which assesses state policies and programmes.
- The nationwide Index is a joint effort of the NITI Aayog and BEE.
- It will help in implementing national energy efficiency initiatives in states and meet both State as well as national goals on energy security, energy access and climate change.
- States are categorised based on their efforts and achievements towards energy efficiency implementation, as 'Front Runner', 'Achiever', 'Contender' and 'Aspirant'.
- **Aim:** To create awareness about energy efficiency as a resource and also to develop an action plan for energy conservation initiatives.

## Particulars of the Index:

- The State Energy Efficiency Preparedness Index has 63 indicators across Building, Industry, Municipality, Transport, Agriculture and DISCOM with 4 cross-cutting indicators.
- The Index examines states' policies and regulations, financing mechanisms, institutional capacity, adoption of energy efficiency measures and energy savings achieved.
- The required data was collected from the concerned state departments such as DISCOMs, Urban Development Departments, etc., with the help of State Designated Agencies (SDAs) nominated by the BEE.
- States are categorized based on their efforts and achievements towards energy efficiency implementation, as 'Front Runner', 'Achiever', 'Contender' and 'Aspirant'.
- The 'Front Runner' states in the inaugural edition of the Index are: Andhra Pradesh, Kerala, Maharashtra, Punjab, and Rajasthan based on available data.

## Bureau of Energy Efficiency (BEE):

- BEE was set up under the Ministry of Power in March 2002 under the provisions of the Energy Conservation Act, 2001.

- Its mission is to assist in developing policies and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act, 2001 with the primary objective of reducing energy intensity of the Indian economy.

## CABINET APPROVES EXTENSION OF CONCESSIONAL FINANCING SCHEME (CFS)

### GS 3: Economy | Mobilization of resources

**Prelims level: Particulars of CFS / Mains level: Facilitating Indian defence manufacturers abroad**

### Why in News?

- The Union Cabinet has approved the first extension of Concessional Financing Scheme (CFS) to support Indian Entities bidding for strategically important infrastructure projects abroad.

### Implementation strategy and targets:

- Under the Scheme, MEA selects the specific projects keeping in view strategic interest of India and sends the same to Department of Economic Affairs (DEA).
- The strategic importance of a project to deserve financing under this Scheme, is decided, on a case to case basis, by a Committee chaired by Secretary, DEA.
- Once approved by the Committee, DEA issues a formal letter to EXIM Bank conveying approval for financing of the project under CFS.
- The Scheme is presently being operated through the Export-Import Bank of India, which raises resources from the market to provide concessional finance.
- Government of India (GoI) provides counter guarantee and interest equalization support of 2% to the EXIM Bank.
- Under the Scheme, EXIM Bank extends credit at a rate not exceeding LIBOR (avg. of six months) + 100 bps. The repayment of the loan is guaranteed by the foreign govt.

### Concessional Financing Scheme (CFS):

- The scheme envisages GoI to provide counter guarantee and interest equalization of 2 % to EXIM Bank to offer concessional finance to any foreign Govt. or foreign Govt. owned or



# VETRII'S UPSC PIB – August -2018

controlled entity if any Indian entity, succeeds in getting contract for the execution of a project.

- Under the CFS, the GoI supports Indian Entities bidding for strategically important infrastructure projects abroad since 2015-16.
- Since the objectives of the Scheme continue to be relevant, it is proposed to extend the Scheme for another five years from 2018 to 2023.

## What was the situation prior to CFS?

- Prior to the introduction of CFS, Indian entities were not able to bid for large projects abroad since.
- The cost of financing was very high for them and bidders from other countries such as China, Japan, Europe and US were able to get credit at superior terms (i.e. lower interest rate and longer tenures giving advantage to bidders from those countries).
- Union Government is executing CFS since 2015-16 to support Indian entities bidding for strategically important infrastructure projects abroad.
- CFS has enabled India to generate substantial backward linkage induced jobs, demand for material and machinery in India and also created a lot of goodwill for India.

## Major Impact:

- Prior to the introduction of CFS, Indian entities were not able to bid for large projects abroad since the cost of financing was very high for them and bidders from other countries such as China, Japan, Europe and US were able to provide credit at superior terms, i.e., lower interest rate and longer tenures which works to the advantage of bidders from those countries.
- Also, by having projects of strategic interest to India executed by Indian entities, the CFS enables India to generate substantial backward linkage induced jobs, demand for material and machinery in India and also a lot of goodwill for India.

## STRATEGIC INVESTMENT FUND UNDER NIIF

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

**Prelims level: NIIF, Strategic Investment Fund / Mains level: Government initiatives for reviving infrastructure sector and providing required capital to the sector.**

### Why in News?

- Finance Ministry is planning to set up a fund under the National Investment and Infrastructure Fund (NIIF) dedicated for strategic investments.
- As on date, three funds have been established by the Government under the NIIF platform and registered with SEBI.

### Three funds are:

- Category II Alternative Investment Funds and National Investment and Infrastructure Fund II ('Strategic Fund')
- National Investment and Infrastructure Fund (or Master Fund)
- NIIF Fund of Funds – I.

### Strategic Fund:

- The objective of National Investment and Infrastructure Fund II ('Strategic Fund') is to invest largely in equity and equity-linked instruments.
- The Strategic Fund will focus on green field and brown field investments in the core infrastructure sectors.
- It will focus on green field and brown field investments in the core infrastructure sectors.

### National Investment and Infrastructure Fund (NIIF):

- Proposed in Union Budget 2015, National Investment and Infrastructure Fund (NIIF) has been set up in last month of 2015.
- The objective of NIIF is to maximize economic impact mainly through infrastructure development in commercially viable projects, both greenfield and brownfield, including stalled projects, NIIF would solicit equity participation from strategic anchor partners.
- The Fund aims to attract investment from both domestic and international sources.

# VETRII'S UPSC PIB – August -2018

- The objective of NIIF is to maximize economic impact mainly through infrastructure development in commercially viable projects, both greenfield and brownfield, including stalled projects, NIIF would solicit equity participation from strategic anchor partners.
- NIIF has been structured as a fund of funds and set up as Category II Alternate Investment Fund (AIF) under the Securities and Exchange Board of India (SEBI) Regulations.
- It is a Rs. 40000 crore fund to provide long term capital for infrastructure projects.
- The government's contribution would be limited to 49% of the subscribed capital.
- The government will seek participation from strategic investors such as sovereign fund, quasi sovereign funds and multilateral or bilateral investors, which can help leverage this fund to many times.
- Cash-rich PSUs, pension funds, provident funds, National Small Saving Fund will be able to pick up stake in the fund.

## INTRODUCTION OF E-WAY BILL SYSTEM

### GS 3: Economy | Mobilization of resources

Prelims level: e-way bill, GST / Mains level: Issues related to the implementation of GST

### Why in News?

- The E-way Bill System has been introduced nation-wide for inter-State movement of goods with effect from 1st April, 2018.

### Objectives of E-way bill system:

- Single and unified E-way bill for inter-State and intra-State movement of goods for the whole country in self-service mode.
- Enabling paperless and fully online system to facilitate seamless movement of goods across all the States,
- improve service delivery with quick turnaround time for the entire supply chain and provide anytime anywhere access to data/services.
- To facilitate hassle free movement of goods by abolishing inter-State check posts across the country.

# VETRII'S UPSC PIB – August -2018

- The Government undertook various corrective steps in this regard viz., new Information Technology (IT) infrastructure including high end servers were installed to handle the increased load on the system.
- The upgraded system is capable of handling a peak load of 75 lakh E-way bills per day.

## E-way bill:

- EWay Bill is an electronic way bill for movement of goods which can be generated on the eWay Bill Portal.
- Transport of goods of more than Rs. 50,000 (Single Invoice/bill/delivery challan) in value in a vehicle cannot be made by a registered person without an eway bill.
- When an eway bill is generated a unique eway bill number (EBN) is allocated and is available to the supplier, recipient, and the transporter.
- An e-way bill is valid for 1 day for distance less Than 100 Kms and additional 1 day for every additional 100 Kms or part thereof
- The validity of Eway bill can be extended.

## MOBILE APP NIRYAT MITRA

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

**Prelims level: Particulars of the app / Mains level: Initiatives for Export Promotion by the Govt.**

## Why in News?

- Union Ministry of Commerce and Industry has launched Niryat Mitra mobile application for exporters and importers of the country.

## Niryat Mitra mobile app:

- The Niryat Mitra mobile app has been developed by the Federation of Indian Export Organisations (FIEO), the largest exporters' organisation of the country.
- The app provides wide range of information required to undertake international trade from the policy provisions for export and import, applicable GST rate, available export incentives, tariff and market access requirements.

- The app works internally to map the ITC HS code of other countries with that of India and provides all the required data without the users bothering about the HS code of any country.
- The most interesting part is that all the information is available at tariff line.
- It also makes available the export promotion programmes organised by FIEO and provides opportunity to the industry to participate in them, thus, helping and encouraging artisans, cottage, micro, small, medium enterprises to plan for exports.

## Promoting Ease of Doing Business

- The exports are showing good sign and registering increase at the rate of 20%.
- The app will provide big opportunity to everybody and help promote export interests in the country.
- The Human Resource tool of the app enables candidates with interest in the international trade sector to register and apply against the vacancies arising in the sector.
- Companies can also search the profiles of the candidates and engage them.

## **PUBLIC SECTOR BANKS TO COME OUT OF PCA FRAMEWORK**

### **GS 3: Economy | Mobilization of resources**

**Prelims level: PCA / Mains level: NPA problem and solution**

### **Why in News?**

- Union Government is expecting that public sector banks (PSBs) placed under RBI's Prompt Corrective Action (PCA) framework will come out of it by the end of this year.

### **What is Prompt corrective action (PCA) framework?**

- PCA framework is a supervisory tool of RBI, which involves monitoring of certain performance indicators of banks to check their financial health as an early warning exercise and to ensure that banks don't go bust.
- Its objective is to facilitate banks to take corrective measures including those prescribed by RBI, in timely manner to restore their financial health.
- It also provides opportunity to RBI to pay focussed attention on such banks by engaging with management more closely in those areas.

- PCA framework is invoked on banks when they breach any of three key regulatory trigger points (or thresholds).
- They are: Capital to risk weighted assets ratio, Net non-performing assets (NPA) and Return on Assets (RoA).
- Depending on the risk thresholds set in PCA framework, banks are put in two types of restrictions, mandatory and discretionary depending upon their placement in PCA framework levels.
- The mandatory restrictions are on dividend, branch expansion, director's compensation while discretionary restrictions include curbs on lending and deposit.

### **New PCA framework under process:**

- RBI has placed eleven public sector banks – Dena Bank, Central Bank of India, Bank of Maharashtra, UCO Bank, IDBI Bank, Oriental Bank of Commerce, Indian Overseas Bank, Corporation Bank, Bank of India, Allahabad Bank and United Bank of India under the PCA framework.
- Of these, two banks – Dena Bank and Allahabad Bank – are facing restriction on expansion of business.
- Various measures taken by the government including implementation of the Insolvency and Bankruptcy Code (IBC) has yielded good results in terms of reining bad loans and increasing recovery.
- The framework is not intended to constrain the performance of normal operations of the banks for the general public.

### **What are the reasons behind this decision of Government?**

- Operational performance of PSBs has improved in April-June 2018 quarter, with steep reduction in net losses, increase in recoveries and significant improvement in provision coverage ratio.
- Besides, Government is also providing PSUs with adequate capital when required.
- Some of the capital has already been given, as recoveries are taking place and there is a possibility that some banks will not need it in the future.



- As of now, there is no bank that is breaching the regulatory norms prescribed by RBI.

## CENTRE UNVEILS INTERNATIONAL UDAN

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

**Prelims level: UDAN scheme / Mains level: Boosting tourism through subsidized air travel.**

### Why in News?

- The Union government on Tuesday unveiled a draft scheme for extending the affordable air travel programme UDAN to international circuits, with state governments identifying the routes for operation.

### Draft “UDAN International Scheme”:

- State governments will be able to encourage tourism on preferred international air routes by offering subsidy to domestic airlines for a period of three years.
- The Ministry of Civil Aviation has prepared a draft scheme document for “UDAN International” and invited comments from stakeholders.
- The scheme is designed for State governments that are keen to promote air connectivity on international routes identified by them and for which they are willing to provide subsidy to domestic airlines.
- Only fixed wing aircraft with more than 70 seats can be operated under the scheme and airlines will have to conduct a minimum of three and a maximum of seven departures on a given route on three days in a week.
- The Centre has allowed airlines to enter into a code-sharing arrangement with international and domestic airlines for UDAN international.
- The AAI may also offer additional discounts at its own discretion such as landing, parking and housing charges at airports owned by it.

### Role of State Governments in the Scheme:

- As per the draft, a State will identify international routes for which the Airports Authority of India (AAI) will determine a subsidy amount per seat and invite bids from domestic carriers.

- This will be followed by airlines submitting their proposals, which will include the routes they wish to connect as well as the subsidy needed by them.

## Scheme Key Highlights:

- The airlines will bid on the percentage of flight capacity for which they require financial assistance, provided that the figure doesn't exceed 60% of the flight capacity.
- The entity that quotes the lowest amount will be awarded subsidy for a particular route.
- However, the government will grant financial aid only for the actual number of passenger seats that are unsold, even if the airline had sought subsidy for a higher percentage of seating capacity at the time of bidding.
- An airline that is awarded a particular route will have exclusive rights to a subsidy on that route for a period of three years.
- The key difference between this scheme and the regional connectivity scheme (RCS) for domestic routes is that there is no capping of fares.
- Under RCS, fares are capped at ₹2,500 for one hour of flight on a fixed wing aircraft in order to make air travel affordable, which was why the scheme UDAN.
- People with disposable incomes looking to undertake international air travel for the purpose of tourism justify the rationale behind not capping fares.
- The financial assistance to an airline will be offered from the International Air Connectivity Fund (IACF), which will be created through the contributions made by the State government.

## INDIA'S FIRST ISTS CONNECTED WIND POWER PROJECT COMMISSIONED

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

**Prelims level and Mains level: GNA ISTS and the news particulars**

### Why in News?

- The first batch of auctioned 126 MW wind power capacity **Interstate Transmission System (ISTS)**-connected wind energy projects have been commissioned in India.



# VETRII'S UPSC PIB – August -2018

- These projects were tendered by the Solar Energy Corporation of India (SECI) in November 2016 under Tranche I.

## Key Highlights:

- Solar Energy Corporation of India Limited (SECI) conducted India's first auction of wind power projects in February 2017.
- In this the tariff of Rs. 3.46 was discovered, which was much lower than feed in tariffs in vogue those days.
- Under ISTS power generated from one state (renewable resource rich state) could be transmitted to other renewable deficient states.
- A part capacity of 126 MW, located in Bhuj (Gujarat) was Commission. The energy generated from this project is being purchased by Bihar, Odisha, Jharkhand and UP.
- The auction signified a major shift from the earlier regime of state-specific Feed-in-Tariff (FiT) model to a Pan-India, market-driven mechanism.

## ISTS:

- Grant of Connectivity and General Network Access to the inter-state transmission system (ISTS) and other related matters, Regulations, 2017 provide for interstate transmission.
- It would allow for more than one power generator to share a dedicated transmission line that connects their generating stations to the ISTS polling station.
- This will be done after all aspects of the sharing are formalized among the generators, including the sharing of transmission charges and transmission line losses among the generators.

## CULTURE

### HERITAGE CIRCUIT AND NORTH EAST CIRCUIT

**GS 1: Art and Culture | Indian culture will cover the salient aspects of Art Forms, Literature and Architecture from ancient to modern times.**

**Prelims Level and Mains Level: Swadesh Dashan scheme and key features of the scheme.**

## Why in News?

- The Ministry of Tourism has sanctioned two new projects under Heritage and North East Circuits of Swadesh Darshan Scheme for Rs. 164.95 Crores in Punjab and Tripura.

## Heritage Circuit:

- Under Heritage Circuit in the state of Punjab, the project covers sites of Anandpur Sahib – Fatehgarh Sahib – Chamkaur Sahib – Ferozpur – Amritsar – Khatkar Kalan – Kalanour – Patiala at the cost of Rs. 99.95 crores.
- The project includes development of Jallianwala Bagh in Amritsar for Rs. 8 Crores, development of Tourist Infrastructure and Heritage Path at Anandpur Sahib for Rs. 28.99 crores, development of Tourist Infrastructure at Fatehgarh Sahib among others.
- The facilities being developed include Virtual Reality Shows (Jallianwala and Hussainiwala Border), beautification and landscaping, interpretation centres, façade development, wayside amenities, parking, CCTV and Wi-Fi facilities, Cafeterias, Open Air Theatre, drinking water facility etc.

## North East Circuit:

- Under North East Circuit in Tripura, the sites of Surma Cherra- Unakoti- Jampui Hills- Gunabati-Bhuaneshwari- Matabari- Neermahal- Boxanagar- Chotta khola- Pilak- Avangchaarra are covered with total project cost of Rs. 65 Crores.
- The project envisaged infrastructural development of the sites with special emphasis on developing an Interpretation Centre, Tourist Visitor Centres, Cafeteria, Last Mile Connectivity, Illumination of sites and monuments, Wayside Amenities, Floating Jetties, Camping Grounds, Parking Facilities, Adventure Activities, Ghat Development at above sites.

## Swadesh Darshan Scheme:

- The Tourism Ministry had launched 'Swadesh Darshan' scheme with an objective to develop theme-based tourist circuits in the country.
- These tourist circuits will be developed on the principles of high tourist value, competitiveness and sustainability in an integrated manner.

- The scheme is 100% centrally funded for the project components undertaken for public funding.
- To leverage the voluntary funding available for Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and corporate sector .
- Funding of individual project will vary from state to state and will be finalised on the basis of detailed project reports prepared by PMC (Programme Management Consultant).

## **GEOGRAPHY & ENVIRONMENT**

### **KHANGCHENDZONGA BIOSPHERE RESERVE TO BE INCLUDED IN THE WORLD NETWORK OF BIOSPHERE RESERVES**

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

**Prelims Level: KHANGCHENDZONGA NP**

#### **Why in News?**

- The Khangchendzonga Biosphere Reserve has become the 11th Biosphere Reserve from India that has been included in the UNESCO designated World Network of Biosphere Reserves (WNBR).

#### **Key Facts:**

- The decision to include it in WNBR was taken at the 30th Session of International Coordinating Council (ICC) of Man and Biosphere (MAB) Programme of UNESCO held at Palembang, Indonesia.
- India has 18 Biosphere Reserves and with the inclusion of Khangchendzonga, the number of internationally designated WNBR has become 11, with 7 Biosphere Reserves being domestic Biosphere Reserves.
- With its inclusion in the WNBR list, the reserve joins other Indian biospheres such as Nandadevi, Simlipal, Sunderbans, and Nilgiri.
- In total, India has 18 biosphere reserves, among which 11 have been internationally designated WNBR.

- The remaining seven are domestic designated biosphere reserves and the Indian government is trying for their inclusion in the list as well.

## Khangchendzonga Biosphere Reserve:

- Khangchendzonga in Sikkim is one of the highest ecosystems in the world, reaching elevations of 1, 220 metres above sea-level.
- It includes a range of ecolines, varying from sub-tropic to Arctic, as well as natural forests in different biomes that support an immensely rich diversity of forest types and habitats.
- The core area of the Biosphere Reserve is a major transboundary Wildlife Protected Area.
- The southern and central landscape, which makes up 86% of the core area, is situated in the Greater Himalayas.
- The northern part of the area accounts for 14% is characterized by trans-Himalayan features.
- Buffer zones are being developed to promote eco-tourism activities.
- The core zone – Khangchendzonga National Park was designated a World Heritage Site in 2016 under the 'mixed' category.
- Many of the mountains, peaks, lakes, caves, rocks, Stupas (shrines) and hot springs function as pilgrimage sites.
- The transition zone is targeted for eco-development activities, afforestation, plantation of medicinal herbs and soil conservation measures.
- **Flora**
  - Over 118 species of the large number of medicinal plants found in Dzongu Valley in north Sikkim are of ethno-medical utility.
  - The vegetation includes temperate broadleaf and mixed forests consisting of oaks, fir, birch, maple, willow etc.
  - The vegetation of the park also includes alpine grasses and shrubs at higher altitudes along with many medicinal plants and herbs.
- **Fauna**

- The park contains many mammal species including musk deer, snow leopard, Himalayan tahr, wild dog, sloth bear, civet, Himalayan black bear, red panda, Tibetan wild ass, Himalayan blue sheep, serow, goral and takin etc.
- A recent study revealed, that the Asiatic wild dog has become very rare in the area.

## Recognised under MAB:

- Biosphere reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme to promote sustainable development based on local community efforts and sound science.
- The programme of Biosphere Reserve was initiated by UNESCO in 1971.
- Comprising 669 biosphere reserves in 120 countries, including 20 transboundary sites, the World Network of Biosphere Reserves of the MAB Programme consists of a dynamic and interactive network of sites of excellence.
- The purpose of the formation of the biosphere reserve is to conserve in situ all forms of life, along with its support system, in its totality, so that it could serve as a referral system for monitoring and evaluating changes in natural ecosystems.

## Significance of Admission:

- Betterment of State: The news has brought cheers to the state of Sikkim, already feted for its conservation, ecotourism and organic farming policies. The renewed attention is expected to help put in place measures to address gaps in conservation, development and livelihood challenges.
- Conservation and development: The new designation will broaden the possibility of engaging and co-operating with biosphere reserves in the MAB network internationally in order to look for conservation and development in a holistic manner.
- Research: It will give importance to research and development activities so to find out gap areas in conservation, in development and in livelihood so they can be addressed.

## Understanding Biosphere Reserve:

- According to UNESCO, "Biosphere Reserves are the areas of terrestrial and coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its

sustainable use. They are internationally recognized, nominated by the national government and remain under sovereign jurisdiction of the states where they are located”.

- Biosphere Reserve has three interrelated zones that aim to fulfil three complementary and mutually reinforcing functions:
- **Core area:** It comprises the strictly protected ecosystem that contributes to the conservation of landscapes, ecosystem, species and genetic variation.
- **Buffer Zone:** It surrounds or adjoins the core areas, and it is used for activities compatible with sound ecological practices that can reinforce scientific research, education, monitoring, and training.
- **Transition Zone:** It is the part of the reserve where the greatest activity is permitted, fostering economic and human development that is ecologically sustainable.

## Objectives of BRs:

- The biosphere reserve should fulfil the following three objectives:
- In-situ conservation of biodiversity of natural and semi-natural ecosystems and landscapes
- Contribution to sustainable economic development of the human population living within and around the Biosphere Reserve.
- Provide facilities for long term ecological studies, environmental education and training and research and monitoring.
- In order to fulfil the above objectives, the Biosphere Reserves are classified into zones like the core area, buffer area. The system of functions is prescribed for each zone.

## UNESCO's Man & Biosphere Programme:

- UNESCO's Man and the Biosphere Programme (MAB) is an Intergovernmental Scientific Programme that was launched in 1971.
- UNESCO's Man & Biosphere Programme logo
- It aims to establish a scientific basis for the improvement of relationships between people and their environments.

- It proposes interdisciplinary research, demonstration and training in natural resources management.
- Its World Network of Biosphere Reserves currently counts more than 600 sites in 122 countries all over the world, including 20 transboundary sites.
- The first of India's reserves to make it to UNESCO's list was Tamil Nadu's Niligiri Biosphere Reserve in 2000.
- Under the programme, Protection is granted not only to the flora and fauna of the protected region, but also to the human communities who inhabit these regions, and their ways of life.

## PARIVESH - A SINGLE WINDOW HUB ENVIRONMENT MANAGEMENT SYSTEM

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

**Prelims level: Particulars of PARIVESH / Mains Level: Digital India initiatives on environmental issues and impacts**

### Why in News?

- Prime Minister Narendra Modi launched PARIVESH (Pro-Active and Responsive facilitation by Interactive, Virtuous and Environmental Single-window Hub) on the occasion of World Biofuel Day.

### PARIVESH - Hub:

- It is a Single-Window Integrated Environmental Management System which stands for Pro-Active and Responsive facilitation by Interactive, Virtuous and Environmental Single-window.
- It is a workflow-based application and portal, based on the concept of web architecture.
- The system has been designed, developed and hosted by the Ministry of Environment, Forest and Climate Change, with technical support from National Informatics Centre, (NIC).



- It automates the entire process of submitting the application and tracking the status of such proposals at each stage of processing.

## Utility of the portal PARIVESH:

- PARIVESH is a workflow-based application, based on the concept of web architecture.
- It has been designed, developed and hosted by the Ministry of Environment, Forest and Climate Change with technical support from National Informatics Centre, New Delhi.
- It facilitates for online submission, monitoring and management of proposals submitted by Project Proponents to the MOEFCC, as well as to the State Level Environmental Impact Assessment Authorities (SEIAA).
- The main highlights of PARIVESH include –
  - Single registration and single sign-in for all types of clearances (i.e. Environment, Forest, Wildlife and CRZ),
  - unique-ID for all types of clearances required for a particular project and
  - single Window interface for the proponent to submit applications for getting all types of clearances (i.e. Environment, Forests, Wildlife and CRZ clearances)

## Significance of PARIVESH:

- With PARIVESH, the Environment Ministry has become more of a facilitator than a regulator.
- PARIVESH offers a framework to generate economic growth and strengthens sustainable development through e-governance.
- PARIVESH automates the entire process of submitting the application and tracking the status of such proposals at each stage of processing.
- With automatic highlighting of non-compliance by the system, PARIVESH helps in improving the overall performance and efficiency of the whole appraisal process.
- PARIVESH also helps the processing authorities, as it has a single window system for central, state and district-level clearances and auto-generation of agenda (based on first come, first served principle), minutes of the meetings and online generation of approval letters.



- The facility of Geographic Information System (GIS) interface for the Appraisal Committee will help them in analyzing the proposal efficiently, automatic alerts (via SMS and emails) at important stages to the concerned officers, committee members and higher authorities to check the delays, if any.
- It also enables project proponents, citizens to view, track and interact with scrutiny officers, generates online clearance letters, online mailers and alerts to state functionaries in case of delays beyond stipulated time for processing of applications

## NATIONAL WILDLIFE GENETIC RESOURCE BANK DEDICATED TO NATION

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

**Prelims level: Particulars of the Gene Resource Bank, LaCONES / Mains level: Conservation of threatened species**

### Why in News?

- Union Science and Technology Minister Harsh Vardhan today dedicated to the nation, the National Wildlife Genetic Resource Bank in the city.
- Genetic resources from 23 species of Indian wild animals have been collected and preserved.

### Genetic Resource Bank:

- The state-of-the-art bank is equipped with sophisticated equipment to preserve the genetic resources that could be utilised to virtually resurrect an animal species in case it goes extinct.
- This facility would increase the collection of genetic resources from wildlife through collaboration with zoos in India
- The Genetic Resource Bank will store genetic material of Indian species. It will also help in protecting India's biodiversity and environment.

- This would facilitate the exchange of genetic material between Indian zoos for maintaining genetic diversity and conservation management made accessible to scientists and wildlife managers for implementing conservation programmes.

## Laboratory for the Conservation of Endangered Species (LaCONES):

- The Laboratory for the Conservation of Endangered Species (LaCONES) is a dedicated laboratory of the CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad.
- CCMB-LaCONES is the only laboratory in India that has developed methods for collection and cryopreservation of semen and oocytes from wildlife and successfully reproducing endangered blackbuck, spotted deer and Nicobar pigeons.
- Wildlife Genetic Resource Banking (GRB) is the systematic collection and preservation of tissues, sperm, eggs and embryos, genetic material (DNA/RNA).
- It helps prevent the loss of valuable individuals to the gene pool.

## Reintroducing Indian Mouse Deer:

- The Telangana Forest Department, Central Zoo Authority, Nehru Zoological Park and CCMB have joined hands to conduct.
- The first-ever planned reintroduction of the Indian spotted chevrotain (*Moschiola indica*), also known as Indian mouse deer.
- This follows more than seven years of conservation breeding of the elusive species at a dedicated facility in the premises of Nehru Zoological Park.
- This helped increase the captive mouse deer population to around 230 individuals till March this year.

## INDIA'S FIRST BIOFUEL FLIGHT

**GS 2: Environment | Conservation, environmental pollution and degradation, environmental impact assessment.**

**Prelims level: Biofuel, Jatropha plant / Mains level: Decreasing demand for crude oil & potential of biofuels and significance of renewable energy resources in modern transportation**

## Why in News?

- India has now joined the small league of nations with the US and Australia to have flown a biofuel-powered aircraft.
- The Spicejet flight, featuring a latest generation Q400 aircraft, had been flagged off from the Dehradun airport to New Delhi.

## Significance of the move:

- The experiment is first-of-its-kind in India. With this, India joins the exclusive club of nations using biofuel in aviation.
- Its successful implementation provides a significant boost to encourage alternative fuels in transport and aviation sector, as envisaged in the National Biofuel's Policy.
- India has been attempting to promote biofuels to reduce dependence on fossil fuel. The environment-friendly initiative is expected to reduce the country's import bills.
- The biofuel was developed by Indian Institute of Petroleum- Dehradun.

## Usage of Biofuels on flights:

- The use of bio jet fuel, apart from reducing greenhouse gas emissions by about 15 percent and sulfur oxides (SO<sub>x</sub>) emissions by over 99 percent, is expected to provide indigenous jet fuel supply security, possible cost savings as feedstock availability at farm level scales up, superior engine performance and reduced maintenance cost for the airline operators.
- Biofuel flights could make air travel cleaner and more efficient, thus drastically reducing the cost of airline operations by reducing the dependency on aviation turbine fuel.
- The biofuel is made partially from renewable resources such as agricultural residues, non-edible oils and bio-degradable fractions of industrial and municipal wastes.

## Background:

- The genesis of this development goes back several years to an Indo-Canadian consortium project from 2010 to 2013 involving CSIR-IIP, Indian Oil, Hindustan Petroleum, IIT Kanpur and IISc Bangalore, in which research was directed towards the production of Bio-aviation fuel by CSIR-IIP from jatropha oil and its evaluation under various conditions.

- The test culminated in a detailed engine test by Pratt and Whitney in Canada that showed fitness for purpose.
- Spicejet and Chhattisgarh Biofuel Development Authority, which supplied the jatropha oil for the flight after sourcing from over 500 farmers, received considerable policy and regulatory support from the MOPNG Working Group on Biofuels and the Directorate General Civil Aviation (DGCA) in making the flight happen.

## DEFENCE

### INDIA SET TO BUILD NEW FIGHTER JET ADVANCED MEDIUM COMBAT AIRCRAFT

#### GS 3: Internal Security | Security challenges and their management in border area

Prelims level: Advanced Medium Combat Aircraft / Mains level: Increasing IAFs stealth capacity and fleet

#### Why in News?

- India's next indigenous fighter jet – the Advanced Medium Combat Aircraft (AMCA) – is expected to make its first flight by 2032.

#### Advanced Medium Combat Aircraft:

- The aircraft will be powered by the same GE-414 engine on the LCA Mk-2 variant which is in the design phase.
- A GE-414 produces 98kN thrust compared to 84kN thrust of the GE-404 engine which is on the LCA Mk1.
- The Indian Air Force has given land to the Defence Research and Development Organisation to set up facilities for the project.
- The plan is to build on the capabilities and expertise developed during the development of the light combat aircraft (LCA) and produce a medium fifth generation fighter aircraft.
- At Aero India 2016, DRDO officials had stated that the basic design configuration has been frozen after wind tunnel testing and there are three critical technologies that need to be developed – stealth, thrust vectoring and super cruise.

## Improvising Stealth Capacity:

- There are two major ways of making a military platform stealthier. One is geometric stealth and other is material stealth.
- In geometric stealth, the shape of the aircraft is designed at such angles so as to deflect away maximum radar waves thereby minimising its radar cross section.
- In material stealth, radar-absorbing materials are used in making the aircraft which will absorb the radio waves thus reducing the radar footprint.
- The AMCA will initially be based on geometric stealth.

## INDIAN POLITY / GOVERNANCE

### HOMOEOPATHY CENTRAL COUNCIL AMENDMENT BILL, 2018

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

**Prelims level: Highlights of the Bill / Mains level: Highlights of the Bill**

## Why in News?

- Lok Sabha has passed the Homoeopathy Central Council (Amendment) Bill 2018.
- It seeks to replace the Central Council of Homoeopathy (CCH) with a board of governors and is aimed at bringing accountability and quality in homeopathy education system.

## Key features of the Bill:

- **Supersession of the Central Council:**
  - It amends the 1973 Act to provide for the supersession of the Central Council with effect from May 18, 2018.
  - The Central Council will be reconstituted within one year from the date of its supersession.
  - In the interim period, the central government will constitute a Board of Governors, which will exercise the powers of the Central Council.
- **Board of Governors:**

- The Board of Governors will consist of up to seven members including: (i) persons of eminence in the field of homoeopathy education, and (ii) eminent administrators, appointed by the central government.
- The central government will select one of these members as the Chairperson of the Board. With regard to policy decisions, the directions of the central government will be final.
- **Permission for existing homoeopathy colleges:**
  - The Bill states that: (i) if any person has established a homoeopathy medical college, or (ii) if an established homoeopathy medical college has opened new courses or increased its admission capacity before the Ordinance was promulgated, it will have to seek permission from the central government within one year.
  - If the person or homoeopathy medical college fails to seek such permission, then any medical qualification granted to a student from such medical college will not be recognised under the Act.

## RAJASTHAN FIRST STATE TO IMPLEMENT BIOFUEL POLICY

**GS2: Governance | Government policies and interventions for development in various sectors and issues arising out of their design and implementation.**

**Prelims level: Particulars of the National Policy on Biofuels / Mains level: Salient features of Biofuel policy.**

### Why in News?

- Rajasthan has become the first State in the country to implement the national policy on biofuels.
- The policy lays emphasis on increasing production of oilseeds and establish a Centre for Excellence in Udaipur to promote research in the fields of alternative fuels and energy resources.

### Details:

- Under this policy, State Government will lay emphasis on increasing production of oilseeds and establish Centre for Excellence in Udaipur to promote research in fields of alternative fuels and energy resources.



- Biodiesel plant of capacity of eight tonnes per day already has been installed in the State with financial assistance of Indian Railways.
- State government will give emphasis to promote marketing of biofuels and generate awareness about them.
- State Rural Livelihood Development Council will also encourage women's self-help groups (SHGs) to explore the scope for additional income through supply of biodiesel

### National Policy on Biofuels- 2018:

- The policy categorises of biofuels into first generation (1G), second generation (2G) and third generation (3G) to enable extension of appropriate financial and fiscal incentives under each category.
- It seeks to help farmers dispose of their surplus stock in an economic manner and reduce the country's oil import dependence.
- It has expanded the scope of raw materials for ethanol production by allowing use of sugarcane juice, sugar containing materials like sweet sorghum, sugar beet, starch containing materials like corn, cassava, damaged food grains like broken rice, wheat, rotten potatoes which are unfit for human consumption, for ethanol production.
- It also encourages setting up of supply chain mechanisms for biodiesel production from non-edible oilseeds, used cooking oil, short gestation crops.

### Salient Features of the policy:

- **Categorization:** The Policy categorises biofuels as "Basic Biofuels" viz. First Generation (1G) bioethanol & biodiesel and "Advanced Biofuels" – Second Generation (2G) ethanol, Municipal Solid Waste (MSW) to drop-in fuels, Third Generation (3G) biofuels, bio-CNG etc. to enable extension of appropriate financial and fiscal incentives under each category
- **Scope of raw materials:** The Policy expands the scope of raw material for ethanol production by allowing use of Sugarcane Juice, Sugar containing materials like Sugar Beet, Sweet Sorghum, Starch containing materials like Corn, Cassava, Damaged food grains like wheat, broken rice, Rotten Potatoes, unfit for human consumption for ethanol production.
- **Protection to farmers:** Farmers are at a risk of not getting appropriate price for their produce during the surplus production phase.

- Taking this into account, the Policy allows use of surplus food grains for production of ethanol for blending with petrol with the approval of National Biofuel Coordination Committee.
- **Viability gap funding:** With a thrust on Advanced Biofuels, the Policy indicates a viability gap funding scheme for 2G ethanol Bio refineries of Rs.5000 crore in 6 years in addition to additional tax incentives, higher purchase price as compared to 1G biofuels.
- **Boost to biodiesel production:** The Policy encourages setting up of supply chain mechanisms for biodiesel production from non-edible oilseeds, Used Cooking Oil, short gestation crops.

### Expected benefits:

- **Import dependency:** The policy aims at reducing import dependency.
- **Cleaner environment:** By reducing crop burning & conversion of agricultural residues/wastes to biofuels there will be further reduction in Green House Gas emissions.
- **Health benefits:** Prolonged reuse of Cooking Oil for preparing food, particularly in deep-frying is a potential health hazard and can lead to many diseases. Used Cooking Oil is a potential feedstock for biodiesel and its use for making biodiesel will prevent diversion of used cooking oil in the food industry.
- **Employment Generation:** One 100klpd 2G bio refinery can contribute 1200 jobs in Plant Operations, Village Level Entrepreneurs and Supply Chain Management.
- **Additional Income to Farmers:** By adopting 2G technologies, agricultural residues/waste which otherwise are burnt by the farmers can be converted to ethanol and can fetch a price for these waste if a market is developed for the same.

### SEVA BHOJ YOJNA - SCHEME

**GS2: Governance | Government policies and interventions for development in various sectors and issues arising out of their design and implementation**

**Prelims Level: 'Seva Bhoj Yojna'- features. / Mains Level: GST and its implications, issues associated and reforms to resolve them**



## Why in News?

- Union Ministry of Culture has launched- 'Seva Bhoj Yojna' – a scheme to reimburse central share of CGST and IGST on food, prasada, langar or bhandara offered by religious and charitable institutions.
- The 'Seva Bhoj Yojna' has a total outlay of Rs 325.00 crore for financial years 2018-19 and 2019-20.

## Key Highlights

- The scheme will compensate the religious and charitable institutions of the Central Government share of the Central Goods and Services Tax (CGST) and Integrated Goods and Service Tax (IGST)
- It mainly aims to lessen the financial burden on religious and charitable bodies that provide food, prasada, langar and bhandara free-of-cost without any discrimination to the public.
- The religious or charitable institutions such as temples, gurudwaras, mosques, churches, dharmik ashram, dargah, matth, monasteries that have been in existence for at least three years before applying for financial assistance under the scheme will be eligible for getting benefits under the scheme.
- The Ministry will enroll the eligible religious and charitable institutions for a time period ending with the financial year 2019-20 and subsequently, the enrolment may be renewed by the Ministry, depending on the performance evaluation of the institutions.

## Beneficiaries:

- The charitable religious institutions including temples, gurudwara, mosque, church, dharmik ashram, dargah, monasteries, which fulfill the following criteria are eligible for the grant:
- The institutions that have been in existence for at least five years before applying for financial assistance/grant.
- The institutions that serve free food to at least 5000 people in a month.

# VETRI'S UPSC PIB – August -2018

- The institutions covered under Section 10 (23BBA) of the Income Tax Act or those registered as Society under Societies Registration Act (XXI of 1860) or as a Public Trust under any law for the time being in force of statutory religious bodies constituted under any Act or institutions registered under Section 12AA of Income Tax Act.

## Selection criteria:

- All Eligible religious and charitable institutions first must register with Darpan portal of NITI Aayog and get Unique ID generated by it.
- Thereafter, they shall enroll themselves in CSMS Portal on the Ministry of Culture's website in prescribed format. The applications will be examined by committee constituted for purpose.
- On basis of recommendation of committee, competent authority in Ministry of Culture will register these institutions for reimbursing claim of CGST and Central Government share of IGST paid on mentioned specific items.

## VIDYA LAKSHMI PORTAL FOR EDUCATION LOAN

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

**Prelims level: Particulars of the Initiative / Mains level: Effective step of speedy credit facilitation for students**

## Why in News?

- As part of its digital initiative, Karnataka Bank has integrated its education loan scheme/s with Vidya Lakshmi Portal.

## Vidya Lakshmi Portal- Highlights:

- Vidya Lakshmi Portal provides a single window for students to access information and make application for Educational Loans provided by Banks.
- This portal has been developed under the guidance of Department of Financial Services (Ministry of Finance), Department of Higher Education (Ministry of Human Resource Development) and Indian Banks Association (IBA).

- Students can view, apply and track the education loan applications to banks anytime, anywhere by accessing the portal
- It was launched by the Government on August 15, 2015 to ensure that students can avail loans easily through single window system of banks for education loans.
- Banks follow Indian Banks' Association (IBA) guidelines in this regard which stipulates that education loan applications have to be disposed off, in the normal course, within a period of 15 to 30 days.

## **NITI AAYOG IDENTIFIED 117 DISTRICTS AS ASPIRATIONAL DISTRICTS FOR RUSA SCHEME**

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

**Prelims level: RUSA Scheme**

### **Why in News?**

- NITI Aayog has identified 117 districts as 'Aspirational Districts' for Rashtriya Uchchar Shiksha Abhiyan (RUSA).
- These districts have been selected on the basis of the composite index which includes published data of deprivation enumerated under Socio-Economic Caste Census, Health & Nutrition, Education and Basic Infrastructure.

### **Opening of new Model Degree Colleges (MDCs):**

- During the second phase of RUSA, central assistance is provided for opening of new Model Degree Colleges(MDCs) in these 'Aspirational Districts' and in unserved & underserved districts in North Eastern and Himalayan States.
- The central support provided under the component of new MDCs is infrastructural in nature in which funds are released for creation of Colleges with requisite infrastructure such as appropriate number of class rooms, library, laboratory, faculty rooms, toilet blocks and other essential requirements for technologically advanced facilities.

- Further, under this component, a commitment is given by the State Governments that all recurring expenditure (including salaries) in respect of the MDC being established, will be borne by the respective State Government.
- Additionally, under a separate component of RUSA viz., Faculty Recruitment Support, central support is provided for creation of additional posts of Assistant Professors.

## RUSA Scheme:

- Rashtriya Uchchar Shiksha Abhiyan (RUSA) is a Centrally Sponsored Scheme (CSS), launched in 2013 aims at providing strategic funding to eligible state higher educational institutions.

The salient objectives of RUSA are to

- Improve the overall quality of state institutions by ensuring conformity to prescribed norms and standards and adopt accreditation as a mandatory quality assurance framework.
- Usher transformative reforms in the state higher education system by creating a facilitating institutional structure for planning and monitoring at the state level, promoting autonomy in State Universities and improving governance in institutions.
- Ensure reforms in the affiliation, academic and examination systems.
- Ensure adequate availability of quality faculty in all higher educational institutions and ensure capacity building at all levels of employment.
- Create an enabling atmosphere in the higher educational institutions to devote themselves to research and innovations.
- Expand the institutional base by creating additional capacity in existing institutions and establishing new institutions, in order to achieve enrolment targets.
- Correct regional imbalances in access to higher education by setting up institutions in unserved & underserved areas.
- Improve equity in higher education by providing adequate opportunities of higher education to SC/STs and socially and educationally backward classes; promote inclusion of women, minorities, and differently abled persons

## UMANG

**GS 2: Governance | e-governance- applications, models, successes, limitations, and potential**

**Prelims and Mains: Key features of UMANG.**

### Why in News?

- Recognizing the importance of reaching out to the consumers and to safeguard their interests, Telecom Regulatory Authority of India (TRAI) has now integrated its Mobile Apps namely DND 2.0 & MyCall with UMANG Platform.

### TRAI MyCall App:

- It is an intuitive and user-friendly application for Crowdsourced Voice Call Quality Monitoring.
- It helps Mobile phone users to rate their experience about voice call quality in real time and help TRAI gather consumer experience data along with Network data.
- How it works?
- A pop-up requests the user to rate the call after it ends. Callers simply select their rating in the form of stars and indicate if the calls were made in indoor, outdoor or while travelling. Callers can also provide additional details such as noise or audio delay or mark a call-drop.

### DND 2.0 App:

- DND (Do Not Disturb) Services App enables smart phone users to register their mobile number under DND and report spam messages or calls to avoid Unsolicited Commercial Communication (UCC)/Telemarketing Calls/SMS.
- All about UMANG App:
- The UMANG App was launched with an aim to make the government accessible on the mobile phone of the citizens.
- UMANG stands for 'Unified Mobile Application for New-age Governance' and is envisaged to make e-governance.
- Umang is an initiative to promote Digital India program.
- The app was developed by the Ministry of Electronics and Information Technology (MeitY) and National e-Governance Division (NeGD).

## Key features of UMANG App:

- The UMANG App provides a unified approach where you can install one application to avail multiple government services.
- It contains 162 services of 33 departments or applications and 4 States.
- It is a single mobile app that have an access to 1200 services of various government offices from Centre, State and utility services.
- It provides all pan India e-Gov services like Aadhaar and Digilocker on one single platform.
- Whether one needs to pay utility bills, file income tax, book a gas cylinder, know about your Provident fund account or have Aadhaar related query, UMANG provides all these services.

## ACCESS TO ANDAMAN EASED

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

Prelims level: Restricted Area Permit/ Mains level: Boosting tourism in India.

### Why in News?

- The Union government has decided to exclude 29 inhabited Andaman & Nicobar Islands from the Restricted Area Permit (RAP) regime, subject to certain conditions, to boost tourism and overall development of Andaman & Nicobar Islands.

### Restricted Area Permit (RAP) regime:

- RAP regime has been notified under Foreigners (Restricted Areas) Order, 1963.
- Under it, foreign nationals are not normally allowed to visit protected or restricted area unless Government is satisfied that there are extra-ordinary reasons to justify their visit.
- Every foreigner, except citizen of Bhutan, who desires to enter and stay in protected or restricted area, is required to obtain special permit from competent authority having power to issue such permits to foreigner, seeking it.
- Citizens of Afghanistan, China and Pakistan and foreign nationals of Pakistani origin are exception and are not allowed to enter such areas.



## List of the islands permitted for foreigner's visit include:

- East Island, North Andaman, Smith Island, Curfew Island, Stewart Island, Land Fall Island, Ayes Island, Middle Andaman, Long Island, Strait Island, North Passage, Baratang, South Andaman, Havelock, Neil Island, Flat Bay, Little Andaman, Chowra, Tillang Chong Island, Teresa, Katchal, Nancowry, Kamorta, Pulomilo, Great Nicobar, Little Nicobar, Narcondam Island and Interview Island.
- Foreigners will also be allowed to visit 11 uninhabited Islands, to be notified by Andaman and Nicobar Islands Administration, only for day visits.

## Exceptions:

- Citizens of Afghanistan, China and Pakistan and foreign nationals having their origin in these countries would continue to require RAP to visit Andaman & Nicobar Islands. In such cases, RAP may be granted only after obtaining prior approval of the ministry of home affairs.
- For visiting Mayabunder and Diglipur, citizens of Myanmar will continue to require RAP which shall be issued only with the prior approval of the MHA.

## SWACHH SURVEKSHAN 2019, ODF+ & ODF ++ PROTOCOLS AND SWACHH MANCH WEB PORTAL

**GS 2: Governance | Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes | e-governance- applications, models, successes, limitations, and potential**

**Prelims Level: Various initiatives under Swachh Bharat Mission / Mains Level: assess impacts of Swachh Bharat Mission on the onset of its final phase.**

## Why in News?

- Swachh Survekshan 2019, ODF+ & ODF ++ Protocols and Swachh Manch Web Portal
- Ministry of Housing & Urban Affairs (MoHUA) is set to launch the Swachh Survekshan 2019.
- Parallely, a slew of new initiatives under the SBM-Urban as well as the Ease of Living Index will also be launched.

## Success of Swachh Bharat:

- The recently concluded Swachh Survekshan 2018 ranked 4,203 Cities.
- Swachh Survekshan has caught the imagination of citizens and stakeholder alike: in 2016, 1 lakh citizens provided their feedback in the survey.
- In 2017, nearly 20 lakh citizen feedback was received. 2018 garnered feedback from 38 lakh citizens, a milestone to the way in which the SBM has become an integral part of citizens' mental maps.
- The survey has already succeeded in fostering a spirit of healthy competition among towns and cities to improve their service delivery to citizens, towards creating cleaner cities.

## Highlights of Swachh Survekshan 2018:

- 79% of residents find their area cleaner than last year.
- 73,875 waste pickers provided formal livelihood.
- In 137 cities, > 60% of the bulk garbage generators are doing on-site composting.
- 33% cities of >1 lakh population have ICT based monitoring of their Community and Public Toilets.

## Swachh Survekshan 2019:

- With an aim to increase the coverage of the ranking exercise MoHUA now proposes to conduct its fourth survey – Swachh Survekshan 2019 to rank all cities under Swachh Bharat Mission-Urban (SBM-U).
- The distinctive features of the survey includes encouraging large scale citizen participation, ensuring sustainability of initiatives taken towards garbage free and open defecation free cities, providing credible outcomes which would be validated by third party certification etc.
- The Swachh Survekshan 2019 toolkit that will be launched will contain the detailed survey methodology and component indicators with scores to help cities to prepare themselves for taking the survey.



## SBM ODF+ and ODF++ Protocol:

- The SBM ODF+ protocol focuses on sustaining community/ public toilet usage by ensuring their functionality, cleanliness and maintenance.
- The SBM ODF++ will focus on achieving sanitation sustainability by addressing complete sanitation value chain, including safe containment, processing and disposal of faecal sludge and septage.
- The ODF+ and ++ protocol and toolkit to be launched will detail out the necessary conditions to be achieved by cities for declaring themselves as ODF+ and ODF++, along with the detailed steps required for third party certifications.

## 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 will allow stakeholders to create/invite/participate in volunteering opportunities around neighbourhoods.
- It will enable uploads of pictorial evidence of citizens and organizations participating in the initiatives, as well as record the number of hours volunteered, as acknowledgement of citizens'/organisations' efforts and contributions to the cause of 'swachhata'.
- The Swachh Manch will also be integrated with the existing Swachhata App to act as a citizens' grievance redressal platform.

## Ease of Living Index:

- The Ease of Living assessment standards are closely linked to the Sustainable Development Goals (SDGs) and will provide a strong impetus to India's effort for systematic tracking progress of SDGs in the urban areas.
- It will also be launched along with an Ease of Living Index dashboard.
- Apart from presenting the overall national ranking of 111 cities, the dashboard will present ranking of the cities across pillars, category, geographical zone and population classifications.

- This framework comprises four pillars namely Institutional, Social, Economic and Physical which are further broken down into 15 categories and 78 indicators.
- The dashboard will also have a comparison feature that will allow users to analyse the performance across cities on various liveability parameters.

## POST MATRIC SCHOLARSHIP FOR OTHER BACKWARD CLASSES STUDENTS FOR STUDYING IN INDIA

**GS 2: Governance | Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.**

**Prelims level and Mains level: Centrally Sponsored Scheme for education**

### Why in News?

- The Cabinet Committee on Economic Affairs chaired by the Prime Minister Shri Narendra Modi has given its approval for continuation and revision of the Centrally Sponsored Scheme of “Post Matric Scholarship for Other Backward Classes Students for studying in India” (PMS-OBC) till 2020.

### PMS-OBC:

- PMS-OBC is flagship scheme of Ministry of Social Justice & Empowerment, in operation since 1998-99.
- It fully centrally sponsored scheme that aims to provide financial assistance to OBC students studying at post-matriculation or post-secondary stage to enable them to complete their education.
- It enables approximately 40 lakh OBC students to pursue higher study after class X per year.

### The revised PMS-OBC:

- The revised scheme will cover larger numbers of eligible and deserving poor OBC students who will be able to pursue higher studies
- It will ensure effective implementation, achieve de-duplication and enhanced monitoring.

- The revision in the PMS-OBC scheme to ensure effective implementation and better monitoring of the schemes includes:
  - Annual parental income will be increased from Rs. One Lakh to Rs. 1.5 lakh.
  - 30% of the funds allocated earmarked for girl students and 5% for students with disabilities.
  - Disbursement of scholarships through Aadhaar seeded bank accounts.
  - Since the Scheme is funds-limited, central assistance shall be released according to the Notional Allocation. The concept of Committed Liability shall not apply to States/UTs for releases.

## NEW CENTRAL SECTOR SCHEME FOR PROMOTING PHARMACOVIGILANCE OF AYUSH DRUGS

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

**Prelims level: Particulars of the Scheme / Mains level: News particulars below**

### Why in News?

- To prevent misleading of customers, the AYUSH Ministry has introduced a new Central sector scheme promoting pharmacovigilance of Ayurveda, Siddha, Unani and Homoeopathy (ASU&H) drugs.

### Scheme for Pharmacovigilance of ASU&H drugs:

- Prime objective of the scheme is to develop the culture of documenting adverse effects and undertake safety monitoring of ASUH drugs and surveillance of misleading advertisements appearing in the print and electronic media.
- The scheme intends to facilitate the establishment of three-tier network of National Pharmacovigilance Centre (NPvCC), Intermediary Pharmacovigilance Centres (IPvCCs) and Peripheral Pharmacovigilance Centres (PPvCC).
- All India Institute of Ayurveda, New Delhi, an autonomous body under the Ministry of AYUSH, has been designated as National Pharmacovigilance Centre for coordinating various activities of the initiative.

## Implementation of Scheme:

- In the initial phase of implementation, five National Institutes of AYUSH are designated as the Intermediary Pharmacovigilance Centres.
- Another forty-two institutions of AYUSH having clinical facilities are designated as Peripheral Pharmacovigilance Centres
- These will take up the work of reporting, documentation, analysis, causality assessment of the adverse reactions and events associated with the consumption of ASUH drugs.
- It is intended to have more such centres across the country and achieve the target of 100 peripheral Pharmacovigilance centres by 2020.
- Representatives of Central Drug Standards Control Organisation as the national drug regulatory authority and the Indian Pharmacopoeia Commission being the WHO Collaborating Centre for Pharmacovigilance in the country are associated in the initiative as mentor and guide.

## Significance of the scheme:

- The quality issues and safety concerns of Ayurveda, Siddha, Unani and Homoeopathy Drugs have been raised from various sources.
- The Ministry felt it necessary in the interest of Public Health to oversee the impact of ASU&H Drugs consumed by the people from the perspective of their safety profile.
- Similarly, publicizing improper drug information in the form advertisements is a matter of concern that needs to be addressed to safeguard the interest of AYUSH drug consumers.
- Pharmacovigilance initiative will facilitate detection of potentially unsafe ASU&H medicines and misleading advertisements for taking regulatory action against them.

## NEW SPECIFIC HEALTH WARNING ON TOBACCO PRODUCTS PACKS

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

**Prelims level: Warnings issued and Penalty for Violation / Mains level: Tobacco usage in India & how to reduce it**

## Why in News?

- The Union Ministry of Health and Family Welfare on August 20, 2018 notified new sets of specified health warnings for all tobacco product packs.
- The new set of health warnings was notified through an amendment in the Cigarettes and other Tobacco Products (Packaging and Labelling) Rules, 2008.

## Specified health warnings:

- The government released two separate set of images. The first set will be used on tobacco products for a period of 12 months, beginning from September 1, 2018.
- All tobacco products manufactured or imported or packaged on or after September 1, 2018 shall display first set of image and those manufactured or imported or packaged on or after September 1, 2019 shall display second set of image.
- Any person engaged directly or indirectly in the production, supply, import or distribution of cigarettes or any tobacco products shall ensure that all tobacco product packages have the specified health warnings exactly as prescribed.
- Violation of any provision is a punishable offence with imprisonment or fine as prescribed in Section 20 of the Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003.

## Violation is Punishable offense:

- Any person engaged directly or indirectly in the production, supply, import or distribution of cigarettes or any tobacco products shall ensure.
- That all tobacco product packages shall have the specified health warnings exactly as prescribed.
- Violation of the above-mentioned provision is a punishable offence with imprisonment or fine as prescribed in Section 20 of the Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003.

## INTERNATIONAL BUDDHIST CONCLAVE 2018

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

**Prelims level: International Buddhist Conclave 2018 / Mains level: Boosting tourism in India**

### Why in News?

- The President of India Shri Ram Nath Kovind inaugurated the “International Buddhist Conclave (IBC), 2018” and also launched the Ministry of Tourism website on important Buddhist sites - [indiathelandofbuddha.in](http://indiathelandofbuddha.in) and a new film showcasing the Buddhist sites in the country on the occasion.

### 6th International Buddhist Conclave (IBC), 2018:

- The theme of the conclave is “Buddha Path – The Living Heritage”
- The aim of the Conclave is to showcase and project the Buddhist Heritage in India and boost tourism to the Buddhist sites in the country and cultivate friendly ties with countries and communities interested in Buddhism.
- The Ministry of Tourism will launch its website in and a new film showcasing the Buddhist sites in the country.
- The Ministerial level delegation from Bangladesh, Indonesia, Myanmar and Sri Lanka will participate along with delegates from 29 countries in the conclave.

### International Buddhist Conclave:

- The Ministry of Tourism, Government of India, has been organizing the International Buddhist Conclave biennially.
- The earlier International Buddhist Conclaves were organized in New Delhi and Bodhgaya (February 2004), Nalanda and Bodhgaya (February 2010), Varanasi and Bodhgaya (September 2012), Bodhgaya and Varanasi (September 2014) and in Sarnath/Varanasi and Bodhgaya (October 2016).
- IBC 2018 will have a religious / spiritual dimension, an academic theme and a diplomatic and business component.



- The Ministry has planned to organize an 'Investors' Summit' during the Conclave to attract investments in developing world class infrastructure at Buddhist sites.

## Buddhist Heritage in India:

- The most precious gift that the Ancient India has given to the World is, the Buddha and his Path, which is, the Eight-fold Path, in Pali language, Aṭṭhangiko Maggo.
- The Buddha Path provides quality of life based on Values as moral principles, or other ideas that guide our choices; Right beliefs, connection to nature and place with spirituality; Way of Life, daily practices, good habits and inspiring traditional skills for mental growth, thereby, making it the Living Heritage.
- On the other hand, the 'Buddha Path' also refers to the Eight Great Places of Buddhist Heritage, (referred in Pali as Aṭṭhamahāṭhānāni).
- These Eight Places are connected with the important events of the life of the Buddha from the time of his Birth, Enlightenment, Teaching Dhamma to suffering humanity, till he passed away, Mahāparinirvāna, at the age of 80 years.

## NCRB TO TRACK COMPLAINTS ON SEXUAL VIOLENCE

### GS 2: Governance | Mechanisms, laws, institutions & Bodies constituted for the protection & betterment of these vulnerable sections

#### Prelims level & Mains level: Rising threat of cyber-crimes against children

#### Why in News?

- Union Ministry of Home Affairs (MHA) has designated National Crime Records Bureau (NCRB) as nodal authority to curb online child pornography, sexual violence and rape videos. It was decided by high-level meeting to discuss recommendations on ways to curb "sexual violence" videos involving women and children.

#### Curbing Sexual Violence:

- To curb easy availability of online child porn and gang rape videos, the Centre has designated the National Crime Records Bureau (NCRB) to act on such online content either on the basis of complaints or by taking suo motu cognizance.



- Under section 79 of the IT Act, 2000, the MHA designated “NCRB, to be the agency of the MHA to perform the functions under clause (b) of sub-section (3) of section 79 of Information Technology Act, 2000 and to notify the instances” as per the earlier order.
- The discussions were held ahead of the upcoming hearing before the Supreme Court on a plea by NGO Prajwala highlighting the availability of child porn and rape videos online
- The apex court in its last hearing had warned social media websites of imposing a fine of Rs 5 lakh each per day till they developed a fool proof mechanism to prevent uploading of objectionable material.
- It directed the ways to filter objectionable materials, including rape videos on laptops and smartphones.

### Child Pornography still out of control:

- While there are certain restrictions on accessing child pornography on desktop computers, the search engines and social media have not been able to curb it on laptops and smartphones.
- A hash value (code) for all such videos and child sexual abuse material has been generated and shared with the content service provider which is being used to identify such videos online.
- NCRB has been mandated to launch an online portal for receiving complaints and acting on them.
- A list of 500 key words used in searching such child porn and rape videos has also been compiled and will be shared with the ISPs, including Google, Yahoo, Facebook, WhatsApp and Microsoft,” said an official.

### States demanding Policing reform:

- The States urged the Centre to bring amendments to the Information Technology Act, 2000 and authorize a sub inspector (SI) level officer to investigate cases under IT Act.
- Only an inspector level officer can investigate IT related offences.

## National Crime Records Bureau:

- The NCRB is a government agency responsible for collecting and analysing crime data as defined by the Indian Penal Code (IPC).
- NCRB is headquartered in New Delhi and is part of the Ministry of Home Affairs (MHA).
- NCRB was set-up in 1986 to function as a repository of information on crime and criminals so as to assist the investigators in linking crime to the perpetrators.
- It was set up based on the recommendation of the Task force and National Police Commission by merging the Directorate of Coordination and Police Computer (DCPC), Statistical Branch of BPR&D, Inter State Criminals Data Branch of CBI and Central Finger Print Bureau of CBI.
- NCRB brings out three annual reports i.e. Crime in India, Accidental Deaths & Suicides in India and Prison Statistics India. These reports are principal reference points for police officers, researchers, media & policy makers.
- Besides, the Bureau is also collecting Crime Statistics and Anti-human Trafficking statistics on monthly basis. The complete software package of 'Monthly Crime Statistics' has been released in the month of December, 2016.
- It collected data that not only picked up the reflective properties we would expect from ice, but was also able to directly measure the distinctive way its molecules absorb infrared light, so it can differentiate between liquid water or vapour and solid ice.

## COMMERCE MINISTRY DEVELOPING NATIONAL LOGISTICS PORTAL

**GS 2: Governance | Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential.**

**Prelims and Mains Level: Features and significance of the portal.**

### Why in News?

- A National Logistics Portal is being developed by the Ministry of Commerce and Industry to ensure ease of trading in the international and domestic markets.
- The portal will link all the stakeholders of EXIM, domestic trade and movement and all trade activities on a single platform.

## Objective of the portal:

- The portal's main objective will be to fulfil the commitment of the Union Government to enhance trade competitiveness, create jobs, boost India's performance in global rankings and pave the way for India to become a logistics hub.

## Key Highlights of the portal:

- The National Logistics Portal will be a single window online marketplace for trade, which will connect businesses, create opportunities and bring together various ministries, departments and the private sector.
- It will bring together all the concerned stakeholders including traders, manufacturers, logistics service providers, infrastructure providers, financial services, Government departments and groups and associations on one platform.
- The portal's creation was announced by Finance Minister Arun Jaitley during this year's budget speech.
- The portal will be implemented in phases and will fulfil the commitment of the Government of India to enhance trade competitiveness, create jobs, boost India's performance in global rankings and pave the way for India to become a logistics hub.

## India's logistics sector:

- The Indian logistics sector is highly defragmented and complex with more than 20 government agencies, 40 partnering government agencies (PGAs), 37 export promotion councils, 500 certifications, 10000 commodities and 160 billion market size.
- It also involves 12 million employment base, 200 shipping agencies, 36 logistic services, 129 ICDs, 168 CFSs, 50 IT ecosystems and banks & insurance agencies.
- According to the estimates of the Economic Survey 2017-18, the worth of Indian logistics market would be around USD 215 billion in next two years compared to about USD 160 billion currently and also will provide livelihood to more than 22 million people and improving the sector will help facilitate 10 per cent decrease in indirect logistics cost leading to 5- 8 per cent growth in exports.

## POSHAN MAAH (NATIONAL NUTRITION MONTH)

**GS 2: Governance | Issues related to health and Welfare schemes for vulnerable sections of the population by the Centre.**

**Prelims Level: Poshan Maah and POSHAN Abhiyan – features. / Mains Level: Significance of the campaign and government efforts to address malnutrition in the country.**

### Why in News?

- The Ministry of Women and Child Development, Government of India had recently organized an orientation workshop for various stakeholders participating in the Poshan Maah (National Nutrition Month) being celebrated in the month of September.
- The month-long intensive campaign will be undertaken with an aim of reaching every household with message of nutrition – ‘har ghar poshan tyohar’ (every house a celebration of nutrition).

### National Nutrition Month:

- It will promote antenatal care, breastfeeding, fight anaemia, convey messages about importance of nutrition for girls and right age of marriage, deliver messages about importance of growth monitoring and also promote hygiene and sanitation.
- It will be jointly organised by NITI Ayog, Ministries of Women and Child Development (WCD), Health and Family Welfare, Panchayati Raj, Rural Development, Drinking Water and Sanitation, Housing and Urban Affairs, Human Resources Development (HRD), Information and Broadcasting, Consumer Affairs, Food and Public Distribution, Tribal Affairs, Minority Affairs and AYUSH.

### Poshan Maah:

- The primary objective of the celebration of Poshan Maah is to take the messages of POSHAN to the grass root level.
- The programme- an initiative of WCD Ministry and NITI Aayog is supported by 18 line Ministries/Departments/Government Organizations.
- It seeks to synergise all efforts by leveraging technology and intends to take nutrition awareness to the level of Jan Andolan or People’s Movement.

- The programme focuses on 8 themes – Antenatal Care, Optimal Breastfeeding (Early & Exclusive), Complementary Feeding, Anemia, Growth Monitoring, Girls-education, diet, right age of Marriage, Hygiene & Sanitation, Food Fortification.

## POSHAN Abhiyan:

- POSHAN Abhiyaan (National Nutrition Mission) was launched on 8th March, 2018.
- **Objectives:** The programme through use of technology, a targeted approach and convergence strives to reduce the level of Stunting, Under-nutrition, Anemia and Low Birth Weight in Children, as also, focus on Adolescent Girls, Pregnant Women & Lactating Mothers, thus holistically addressing malnutrition.
- **Aims:** POSHAN Abhiyaan aims to ensure service delivery and interventions by use of technology, behavioural change through convergence and lays-down specific targets to be achieved across different monitoring parameters over the next few years.
- **Coverage:** To ensure a holistic approach, all 36 States/UTs and 718 districts will be covered in a phased manner by the year 2020.

## STRATEGIC PARTNERSHIP (SP) MODEL - PROCUREMENT OF 111 UTILITY HELICOPTERS FOR THE INDIAN NAVY

**GS2: Governance | Government policies and interventions for development in various sectors and issues arising out of their design and implementation.**

**Prelims Level: Key features of SP model and about DAC. / Mains Level: Significance, concerns and issues associated with SP model.**

### Why in News?

- The Union Defence Ministry gave its approval for the acquisition of 111 utility helicopters for Navy at an estimated cost of over Rs 21,000 crore.
- This is the first project under the MoD's prestigious Strategic Partnership (SP) Model that aims at providing significant fillip to the Government's 'Make in India' programme.

### What is Strategic Partnership (SP) model?

- The strategic partner model is intended to enhance competition, increase efficiencies, facilitate faster and more significant absorption of technology, create a tiered industrial

# VETRI'S UPSC PIB – August -2018

ecosystem, ensure development of a wider skill base, trigger innovation and enable participation in global value chains as well as promote exports.

- Under the model, the government intends to boost private sector participation and create domestic expertise in four key areas, namely, fighter aircraft, helicopters, submarines, and armoured vehicles and main battle tanks.
- One company would be selected for each area based on its competence, which would then tie up with the foreign Original Equipment Manufacturer selected through the procurement process, to build the platform in India with significant technology transfer.

## Significance:

- The SP model, if implemented well, is likely to have a number of benefits for both the private sector and the larger Indian defence industry.
- From the private sector's point of view, the biggest benefit would be the opportunity to participate in some big-ticket contracts – estimated to be worth over two lakh crore rupees in the initial phase of execution – which were hitherto reserved for the DPSUs and OFs.
- Bridging the trust gap: At the same time, the model would also go a long way in bridging the long-standing trust gap between the Indian private sector and MoD, with the latter perceived to be friendlier toward public sector entities.
- Strategic Partners, being private sector companies, are expected to exploit their dynamism, competitiveness, profit orientation, and exposure to the civilian sector for efficient utilisation of the technology, manpower and infrastructure developed in the process.
- The model has a long-term vision of promoting India as a manufacturing hub for defence equipment thus enhancing self-sufficiency and establishing an industrial and R&D ecosystem, capable of meeting the future requirements of the Armed Forces.

## Key Highlights:

- The procurement of the naval utility helicopters will be the first project under the ambitious strategic partnership (SP) model that provides for roping in private firm to build select military platforms in India in partnership with foreign defence manufacturers.



# VETRII'S UPSC PIB – August -2018

- The utility helicopters will be used in attack missions as well as for search and rescue and surveillance operations.
- The DAC also granted approval to other procurement proposals worth Rs 24,879.16 crore, which include one on buying 150 indigenously designed and developed 155 mm advanced towed artillery gun systems for the Indian Army at an approximate cost of Rs 3364.78 crore.
- These gun systems have been indigenously designed and developed by the Defence Research and Development Organisation (DRDO) and will be manufactured by production agencies nominated by DRDO.
- The DAC also approved a proposal to procure 24 naval multi-role helicopters (NMRH), which will have the capability to engage in anti-submarine warfare. The helicopters are an integral part of frontline warships such as aircraft carriers, destroyers, frigates and corvettes.
- Besides this, the DAC also approved procurement of 14 vertically launched short-range missile systems, among which 10 will be indigenously developed. The systems will help boost the self-defence capability of ships against anti-ship missiles.

## FAME INDIA PHASE II

**GS2: Governance | Government policies and interventions for development in various sectors and issues arising out of their design and implementation.**

**Prelims Level: About FAME scheme and particulars / Mains Level: Promoting eco-friendly vehicles**

### Why in News?

- Indian Prime Minister will launch the second phase of the FAME India scheme on September 7, 2018. The scheme offers incentives for mass adoption of electric vehicles with an outlay of Rs 5,500 crore.
- The Prime Minister will unveil the scheme at the inaugural session of 'MOVE' - the global mobility summit, which will be organised in New Delhi from September 7-8.
- The summit will see in attendance several global CEOs from the automotive sector.



## Key Highlights :

- The modalities of the scheme have been finalised by an inter-ministerial panel and it will soon be placed before the union Cabinet for approval.
- The second phase of the scheme spanning five years will offer a subsidy to all categories of electric vehicles, including two-wheelers, three-wheelers and four-wheelers including taxis and electric buses that are used in public transportation.
- The main aim of the scheme is to promote green vehicles and check pollution. It will also envisage setting up a massive charging infrastructure to support electric vehicles.
- However, strong hybrid vehicles, which were entitled to incentives in the ongoing pilot phase of the scheme, will not be able to avail (SOPs) in the second phase.

## Which vehicles are covered under FAME India phase I?

- At present, the incentive is being offered on purchase of strong hybrid and electric cars, two-wheelers and three-wheelers under the Faster Adoption and Manufacturing of (Strong) Hybrid and Electric vehicles (FAME India) scheme.
- Under the scheme, depending on technology, battery-operated scooters and motorcycles are eligible for incentives ranging from Rs 1,800 to Rs 29,000, while in three-wheelers it is between Rs 3300 and Rs 61000.
- Automotive manufacturers claim the incentive from the government at the end of each month.

## Background:

- The FAME India scheme was launched by the Indian Government in 2015 to promote eco-friendly vehicles.
- In April, the Union government had extended the ongoing phase 1 of the FAME India scheme by six months till September-end or till its second phase is approved.
- The first phase of the scheme was initially proposed for two years till March 31, 2017 but was extended twice for six months up to March 31, 2018.

## GOVERNMENT ANNOUNCES REGULATIONS FOR DRONES

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

**Prelims level: Drone regulations, Digital Sky Platform / Mains level: Potential of and threats posed by drone technology**

### Why in News?

- The Directorate General of Civil Aviation has issued the Civil Aviation Requirements (CAR) for civil use of Remotely Piloted Aircraft System (RPAS) commonly known as drones.

### Drones registration rules:

- Drone Regulations 1.0 will enable the safe, commercial usage of drones starting December 1, 2018.
- These are intended to enable visual line-of-sight daytime-only and a maximum of 400 ft altitude operations.
- Airspace has been partitioned into Red Zone (flying not permitted), Yellow Zone (controlled airspace), and Green Zone (automatic permission).

### Digital Sky Platform:

- The Digital Sky Platform is the first-of-its-kind national unmanned traffic management (UTM) platform that implements “no permission, no takeoff” (NPNT)
- The UTM operates as a traffic regulator in the drone airspace and coordinates closely with the defence and civilian air traffic controllers (ATCs) to ensure that drones remain on the approved flight paths.
- Users will be required to do a one-time registration of their drones, pilots and owners
- For every flight (exempted for the nano category), users will be required to ask for permission to fly on a mobile app and an automated process permits or denies the request instantly .

- To prevent unauthorized flights and to ensure public safety, any drone without a digital permit to fly will simply not be able to take off.

## Key features of Drone Regulations 1.0:

- As per the regulation, there are 5 categories of RPAS categorized by weight, namely nano, micro, small, medium and large.
- All RPAS except nano and those owned by NTRO, ARC and Central Intelligence Agencies are to be registered and issued with Unique Identification Number (UIN).
- Unmanned Aircraft Operator Permit (UAOP) shall be required for RPA operators except for nano RPAS operating below 50 ft., micro RPAS operating below 200 ft., and those owned by NTRO, ARC and Central Intelligence Agencies.
- The regulation defines “No Drone Zones” around airports; near the international border, Vijay Chowk in Delhi; State Secretariat Complex in State Capitals, strategic locations/ vital and military installations; etc.

## No Drone Zones:

- The regulation defines “No Drone Zones” around airports; near international border, Vijay Chowk in Delhi; State Secretariat Complex in State Capitals, strategic locations/ vital and military installations; etc.

## Why it took multiple years to put-out regulations on drones?

- The Ministry of Civil Aviation has been working really hard to establish a world leading drone ecosystem in India. The purpose necessitates the development of global standard drone regulations that would permit the commercial application of various drone technologies.
- The preparation of drone regulations through a Civil Aviation Requirement (CAR) took multiple years as:
  - Drone technologies have been evolving very rapidly
  - Many countries are still experimenting with their drone regulations and no ICAO stands have been developed
  - India's security environment necessitates extra precautions.

## INDIA POST PAYMENTS BANK

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

**Prelims level: Particulars of the IPPB, payments banks, etc. / Mains level: Extending banking services through all possible mechanisms is the need of hour and IPPB serves best example for this.**

### Why in News?

- The Union Cabinet has given its approval for revision of the project outlay for setting up of India Post Payments Bank (IPPB) from Rs. 800 crore to Rs. 1,435 crore.

### India Post Payment Bank Project:

- The IPPB is aimed to provide modes of payments/financial services through its technology enabled solutions which will be distributed by the post employees/last mile agents transforming them from mail deliverer to harbinger of financial services.
- The IPPB shall pay incentive/commission to the last mile agents ( Postal Staff and Gramin Dak Sewaks) directly in their accounts for providing IPPB services so as to motivate them to promote IPPB digital services to the customers.
- A part of commission to be paid by IPPB to Department of Posts will be used for increasing the wherewithal of Post office

### Project Key highlights:

- IPPB services shall be available at 650 IPPB branches and 3250 Access Points from 1st September 2018 and in all 1.55 lakh post offices (Access Points) by December 2018.
- The project will generate new employment opportunity for about 3500 skilled banking professionals and other entities engaged in propagating financial literacy across the country.
- The objective of the project is to build the most accessible, affordable and trusted bank for the common man; spearhead the financial inclusion agenda by removing the barriers for the unbanked and reduce the opportunity cost for the under banked populace through assisted doorstep banking.

- The project will supplement Government's vision of "less cash" economy and at the same time promote both economic growth and financial inclusion.
- The robust IT architecture of IPPB has been built taking into consideration bank grade performance, fraud and risk mitigation standards and in line with the best practices from payments & banking domain.

## LAUNCH OF NATIONAL MISSION ON GEM

### GS 2: Polity | Ministries & Departments of the Government

Prelims level: Government e Marketplace (GeM) / Mains level: Benefits of centralised procurement in online mode

### Why in News?

- The National Mission on Government e Marketplace (GeM) will be launched on September 5, 2018 to accelerate the adoption and use of GeM by major central ministries, state governments and their agencies.

### Objective:

- The main aim of the mission is to promote inclusiveness, transparency and efficiency in public procurement and achieve cashless, contactless and paperless transaction.

### Key Highlights:

- The mission will be launched at the respective state headquarters by the Chief Ministers during the 6 weeks' special drive beginning from September 6 to October 15, 2018.
- It will cover important sectors and flagship programmes, the launch of IEC campaign along with training on usage of GeM for buyers and sellers, buyer registration drive to on board government agencies and vendor registration drive with a special focus on MSMEs.
- Its implementation will help increase overall efficiency and lead to cost saving on government expenditure in procurement.

### Government e Marketplace:

- It is an online marketplace to facilitate procurement of goods and services by various Ministries and agencies of the Government.

- The platform offers online, end to end solution for procurement of commonly used goods and services for all central government departments and state governments, public sector units and affiliated bodies.
- It aims to enhance transparency, efficiency and speed in public procurement of goods and services and eliminate corruption.
- The e-marketplace completed two years in 2018 and on August 26, 2018, it crossed Rs 10,800 crore in terms of value and 6.96 lakh in terms of volume of transactions through the platform.
- The platform has more than 1.35 lakh sellers offering 4.43 lakh products and around 26,500 organisations as buyers.
- While all States and Union Territories are buying through the platform, 25 States and UTs have already signed an MoU to make procurement through GeM mandatory. It has led to an overall average saving in cost of procurement to the tune of about 25 per cent.

## SCIENCE & TECHNOLOGY

### BALLISTIC MISSILE INTERCEPTOR AAD SUCCESSFULLY FLIGHT TESTED

**GS 3: Science & Technology | Indigenization of technology & developing new technology**

**Prelims level: AAD / Mains level: India's missile arsenal - Interceptor'**

#### Why in News?

- Defence Research and Development Organisation conducted a successful test of the supersonic endo-atmospheric interceptor missile from Abdul Kalam Island (earlier known as Wheeler Island) Odisha.

#### Missile test:

- The interceptor missile was launched against multiple simulated targets of 1,500 km class ballistic missile.
- The mission objectives of the test were successfully met.

- One of its target was selected on real time and the weapon system radars tracked the target and locked the missile on to it and intercepted it in mid-air on sea surface with high degree of accuracy.
- The complete test including engagement and interception was tracked by a number of electro-optical tracking systems, radars and telemetry stations.
- This test validated some improved features incorporated in the interceptor missile while its major health parameters including its 'kill' effect already have been validated in earlier tests.

## Interceptor Missile:

- The endo-atmospheric interceptor missile is yet to get a formal name.
- It has been developed as part of indigenous efforts to have multi-layer ballistic missile defence system, capable of destroying incoming hostile ballistic missiles.
- It is 7.5-metre long and is capable of intercepting incoming targets at an altitude of 15 to 25 km.
- It is a single stage solid rocket propelled guided missile.
- It is equipped with a navigation system, a hi-tech computer and an electro-mechanical activator.
- It has its own mobile launcher, secure data link for interception, independent tracking and homing capabilities and sophisticated radars.

## Background:

- The Research Centre Imarat (RCI) of the DRDO has played pivotal role in the development of all strategic missiles, spearheaded under the India's double-layered ballistic missile defence (BMD) programme.
- The BMD consists of two interceptor missiles, Advanced Area Defence (AAD) missile for endo-atmosphere or lower altitudes and Prithvi Defence Vehicle for exo-atmospheric ranges.
- The DRDO expects deployment of BMD shield by 2022.



- India will be fourth country in the world after the US, Russia and Israel to successfully built effective anti-ballistic missile system.

## INDIA'S MOON MISSION CHANDRAYAAN-2

### GS 3: Science and Technology | Awareness in Space

Prelims and Mains: The mission, its features and the significance.

#### Why in News?

- Indian Space Research Organisation (ISRO) has postponed Chandrayaan-2, India's second mission to Moon to January 2019.
- This will be the second time the mission has been postponed.

#### Background- timeline of the mission:

- Chandrayaan 2's journey has been rather slow so far. Although the mission was envisioned way back in November 2007, as a joint mission between India and Russia, it had faced a series of setbacks.
- As per the tie-up, Russia was supposed to provide the lander for the mission, while India would develop the rover and orbiter. ISRO had its prototype ready for a 2013 launch but Russia delayed delivering the lander. Later, Russia said it would not be able to provide a lander for ISRO.
- India then called off the deal and decided to make the Chandrayaan mission completely indigenous. The development has taken time, and given that it is the first time India is developing a lander, the programme has faced many glitches like the present one.
- The ambitious mission was earlier planned to be launched in April 2018 and was later fixed for October 2019.
- With this delay, India may lose fourth position in the world for soft-landing on the Moon to Israel as it too is planning to launch a Moon mission in December 2018.

#### Chandrayaan 2 Mission:

- Chandrayaan-2 is India's most challenging and India's second mission to Moon.

# VETRII'S UPSC PIB – August -2018

- It is an advanced version of the previous Chandrayaan-1 mission (launched in 2008) which only involved orbiting around Moon, Chandrayaan-2 is a much complicated mission as it involves an orbiter, lander and rover.
- The mission components have been completely developed indigenously by ISRO and consists of Orbiter, Lander and Rover configuration.
- In this mission, ISRO will for the first time attempt to land a rover on Moon's south-pole.
- The mission involves soft-landing on the lunar surface and the rover will walk and analyze the content on the Moon's surface.
- Chandrayaan 2 will be launched on board of Geosynchronous Satellite Launch Vehicle Mk III (GSLV-F10).
- It will be ISRO's first inter-planetary mission to land a rover on any celestial body.
- The spacecraft (orbiter) weighs around 3,290 kg and it will orbit around Moon and perform objectives of remote sensing the Moon.
- Once GSLV-F10 put the spacecraft in 170 km x 20,000 km elliptical orbit, the orbiter will be manoeuvred towards the 100-km lunar orbit by firing thrusters and then the lander housing the rover will separate from the orbiter.
- The six wheeled rover will move on an unexplored lunar surface and collect soil or rock samples for on-site chemical analysis to gather scientific information on lunar topography, mineralogy, elemental abundance, lunar exosphere and signatures of hydroxyl and water-ice.
- The data will be relayed to Earth through the orbiter.
- The rover will move around the landing site in semi-autonomous mode as decided by the ground commands.
- The soft-landing on the surface of the Moon will be the most complex part of Chandrayaan 2 mission.
- Only US, Russia and China have been able to soft-land a spacecraft on the lunar surface.

## NITI AAYOG TO JOIN HANDS WITH CII TO DEVELOP A ROADMAP FOR GLOBAL INNOVATION INDEX

**GS 3: Science & Technology | Indigenization of technology & developing new technology**

**Prelims level: Global Innovation Index / Mains level: India's position in innovation and measures required to promote innovation culture.**

### Why in News?

- NITI Aayog has proposed to join hands with Confederation of Indian Industry (CII) to develop a Roadmap for Top 10 Rank in Global Innovation Index (GII).
- Global Innovation Index 2018 has placed India at the 57th position among 130 countries.

### Boosting Innovation in India:

- The India Innovation Index was launched by NITI Aayog, Confederation of Indian Industry (CII) along with the World Intellectual Property Organization (WIPO), in collaboration with the Department of Industrial Policy and Promotion (DIPP).
- India's rank on the Global Innovation Index (GII) has improved from 60 in 2017 to 57 in 2018
- India has been consistently climbing the GII ranking for the past two years.

### Importance of GII:

- It provided an opportunity to look at examples from similar economies from across the world and understand how they effected change in their countries.
- We can also draw a distinction between Innovation and Invention and emphasized the role of pure science in building scientific temper in the country.
- Ratan Watal, Principal Adviser of NITI Aayog underlined the need to- Transform India's Innovation Ecosystem by formulating a New Innovation Policy to attract R&D investment into cutting edge technologies and build appropriate infrastructure and institutions.
- Tap Global hotspots of Innovation in latest technologies like AI, Blockchain and Robotics etc.
- Connect Tinkering labs in schools with start-ups, business and high end educational institutions.

# VETRII'S UPSC PIB – August -2018

- Target efficient, productive and outcome driven R&D in the Government Sector.

## GII 2018:

- The GII 2018 marks the 11th edition of the GII, and the beginning of its second decade providing data and insights gathered from tracking innovation across the globe.
- This year's edition, is dedicated to the theme of Energizing the World with Innovation. It analyses the energy innovation landscape of the next decade and identifies possible breakthroughs in fields such as energy production, storage, distribution, and consumption.
- It also looks at how breakthrough innovation occurs at the grassroots level and describes how small-scale renewable systems are on the rise.

## Performance of India:

- This year, India has moved up 3 places as compared to 60th rank in GII 2017 and emerged as top-ranked economy in Central and South Asia.
- India is a top performer in the lower middle-income group, where it is ranked at fifth position. It is the most innovative country in its region of central and southern Asia.
- In the indicators that capture the quality of innovation inputs and outputs, India is ranked second after China in the lower and upper middle-income group combined.
- However, India has fared badly on indicators such as ease of starting business, political stability and safety, overall education and environmental performance.

## Global Innovation Index:

- The Global Innovation Index (GII) is an annual ranking of countries by their capacity for, and success in, innovation.
- GII is jointly released by Cornell University, INSEAD and World Intellectual Property Organisation (WIPO). GII ranks 126 economies based on 80 indicators.
- It is based on both subjective and objective data derived from several sources, including the International Telecommunication Union, the World Bank and the World Economic Forum.
- The index was started in 2007 by INSEAD and World Business, a British magazine.

- The GII is commonly used by corporate and government officials to compare countries by their level of innovation.

## SUCCESSFUL FLIGHT TESTS OF SMART ANTI AIRFIELD WEAPON (SAAW) AND ATGM 'HELINA'

**GS 3: Science & Technology | Indigenization of technology & developing new technology**

**Prelims level: Smart Anti Airfield Weapon, ATGM 'HELINA' / Mains level: Defence production in India**

### Why in News?

- Indigenously designed and developed guided bombs Smart Anti Airfield Weapon (SAAW) were successfully flight tested from IAF aircraft at Chandan range while indigenously developed Helicopter launched Anti-Tank Guided Missile "HELINA" has been successfully flight tested from Army Helicopter at 1400 hours in the range of Pokhran.

### Smart Anti Airfield Weapon (SAAW):

- Indigenously designed and developed guided bombs Smart Anti Airfield Weapon (SAAW) were successfully flight tested from IAF aircraft at Chandan range.
- The weapon system was integrated with live warhead and has destroyed the targets with high precision. The telemetry and tracking systems captured all the mission events.
- This weapon is capable of destroying variety of ground targets using precision navigation.
- The weapon has undergone eight developmental trials till date and performance of system for different ranges under multiple launch conditions has been demonstrated.

### HELINA:

- Indigenously developed Helicopter launched Anti-Tank Guided Missile 'HELINA' has been successfully flight tested from Army Helicopter at 1400hrs in the ranges of Pokhran.
- The weapon system has been tested for its full range.
- The 'HELINA' weapon system released smoothly from the launch platform has tracked the target all through its course and hit the target with high precision.

- All the parameters have been monitored by the telemetry stations, tracking systems and the Helicopters.
- The Missile is guided by an Infrared Imaging Seeker (IIR) operating in the Lock on Before Launch mode.
- It is one of the most advanced Anti-Tank Weapons in the world.

## Significance:

- **Cheap and specialized:** SAAW is India's attempt at building an indigenous weapon for the specialized operation. These precision-guided glide bombs are cheaper than conventional missiles since they do not have the complex propulsion systems that are the norm for cruise missiles.
- **Enhancing the capacity of Indian forces:** Depending on the operational requirements, these missiles could also be used against other ground targets to give Indian forces enhanced area-denial capabilities such as taking out bridges or other ground infrastructure

## CHANDRAYAAN-1 DATA CONFIRMS PRESENCE OF ICE ON MOON

**GS 3: Science & Technology | Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.**

**Prelims level: Particulars of the Chandrayan-1 / Mains level: Great Achievement of India in Space Tech.**

## Why in News?

- The NASA scientists, using data from the Chandrayaan-I spacecraft, on August 21, 2018 confirmed that there are frozen water deposits in the darkest and coolest parts of Moon's Polar Regions. The findings were published in the journal Proceedings of the National Academy of Sciences (PNAS).
- The Chandrayaan-I spacecraft was launched in 2008 by the Indian Space Research Organisation (ISRO).

## NASA's Moon Mineralogy Mapper (M3) is testimony:

- M3, aboard the Chandrayaan-1 spacecraft, launched in 2008 by the Indian Space Research Organisation (ISRO), was uniquely equipped to confirm the presence of solid ice on the Moon.
- Scientists used data from NASA's Moon Mineralogy Mapper (M3) instrument to identify three specific signatures that definitively prove there is water ice at the surface of the Moon.
- It collected data that not only picked up the reflective properties we would expect from ice, but was also able to directly measure the distinctive way its molecules absorb infrared light, so it can differentiate between liquid water or vapour and solid ice.

## National Academy of Sciences (PNAS)- Study:

- Scientists have directly observed definitive evidence of water ice in the darkest and coldest parts of Polar Regions of the Moon.
- At the southern pole, most of the ice is concentrated at lunar craters, while the northern pole's ice is more widely and lightly spread.
- The ice deposits are patchily distributed and could possibly be ancient.
- Most of the newfound water ice lies in the shadows of craters near the poles, where the warmest temperatures never reach above minus 156 degrees Celsius (-250 degrees Fahrenheit).
- Due to the very small tilt of the Moon's rotation axis, sunlight never reaches these regions.

## Importance of the discovery:

- Previous observations indirectly found possible signs of surface ice at the lunar South Pole, but these could have been explained by other phenomena, such as unusually reflective lunar soil.
- Learning more about this ice, how it got there, and how it interacts with the larger lunar environment will be a key mission focus for NASA and commercial partners, as humans endeavour to return to and explore the Moon.



- This brings scope for presence of surface water accessible as a resource for future expeditions to explore and even stay on the Moon.

## OCEAN SERVICES, TECHNOLOGY, OBSERVATIONS, RESOURCES MODELLING AND SCIENCE (O-SMART) SCHEME

**GS 3: Science & Technology | Developments and their applications and effects in everyday life**

**Prelims level: O-SMART scheme / Mains level: Importance of the Coastal Mapping**

### Why in News?

- The Cabinet Committee on Economic Affairs, has given its approval for the umbrella scheme “Ocean Services, Technology, Observations, Resources Modelling and Science (O-SMART)”, aimed at stepping up ocean research and setting up early warning weather systems.
- The scheme encompasses a total of 16 sub-projects addressing ocean development activities such as Services, Technology, Resources, Observations and Science.

### O-SMART Scheme:

- The services rendered under the O-SMART will provide economic benefits to a number of user communities in the coastal and ocean sectors, namely, fisheries, offshore industry, coastal states, Defence, Shipping, Ports etc.
- Currently, five lakhs fishermen community are receiving this information daily through mobile which includes allocation of fish potential and local weather conditions in the coastal waters.
- This will help in reducing the search time for fishermen resulting savings in the fuel cost.
- It seeks to address issues relating to SDG-14, which aims to conserve use of oceans, marine resources for sustainable development.
- It also provides necessary scientific and technological background required for implementation of various aspects of Blue Economy.
- The State of Art Early Warning Systems established Scheme will help in effectively dealing with ocean disasters like Tsunami, storm surges.

- The technologies being developed will help in harnessing the vast ocean resources of both living and non-living resources from the seas around India.
- A fleet of research vessels viz., Technology Demonstration vessel SagarNidhi, Oceanographic Research Vessel SagarKanya, Fisheries and Oceanographic Research Vessel SagarSampada and Coastal Research Vessel SagarPurvi have been acquired to provide required research support.

## Objectives of the Scheme:

- The important deliverables during the next 2 years envisage include-
  - Strengthening of Ocean Observations and Modelling.
  - Strengthening of Ocean Services for Fishermen
  - Setting up Marine Coastal Observatories for monitoring marine pollution in 2018
  - Setting up Ocean Thermal Energy Conversion Plant (OTEC) in Kavaratti
  - Acquisition of 2 Coastal Research Vessels for Coastal research
  - Continuation of Ocean Survey and Exploration of Minerals and Living Resources
  - Technology Development for Deep Ocean Mining- Deep Mining System and Manned Submersibles and
  - Setting up Six Desalination Plants in Lakshadweep

## Other Ocean related activities:

- India has been accorded pioneer status on deep-sea mining of Poly-Metallic Nodules [PMN] in an area of in the Central Indian Ocean [CIO] allotted by International Sea Bed Authority [ISBA]
- India's ocean related activities are now extended from the Arctic to the Antarctic region covering large ocean spaces which have been monitored through a wide spectrum of in situ and satellite-based observations.
- India has also established a state-of-the art early warning systems for ocean disasters, viz, tsunami, cyclones, storm surges etc.
- India had also signed the Antarctic Treaty System and joined Commission of Conservation of Antarctic Marine Living Resources (CCAMLR) for harnessing the resources.

- Besides, the ministry has been monitoring the health of coastal waters of India including shoreline changes and marine ecosystem.
- The others like Remotely Operated Submersible and soil tester, both capable of operation upto 6000 m. water depth, shallow bed mining systems are some of the cutting edge technologies developed.

## ATAL RANKINGS FOR HIGHER EDUCATION INSTITUTIONS

### GS 3: Science & Technology | Indigenization of technology & developing new technology

Prelims level: ARIIA / Mains level: Boosting innovation ecosystem in India

#### Why in News?

- The Centre announced another annual ranking of higher educational institutions, based on how they fare in terms of innovation.
- The new ranking - named Atal Ranking of Institutions on Innovation Achievements (ARIIA) - will be formally launched on October 15, the birth anniversary of former President APJ Abdul Kalam.

#### Significance:

- ARIIA ranking will help inspire Indian institutions to reorient their mindset and build ecosystems to encourage high-quality research, innovation and entrepreneurship.
- More than quantity, ARIIA will focus on the quality of innovations and will try to measure the real impact created by these innovations nationally and internationally.
- The ranking system will also set the tone and direction for institutions for future development for making them globally competitive and in the forefront of innovation.

#### Objective:

- ARIIA has been launched to systematically rank education institutions and universities primarily for innovation output based on all major indicators and parameters that are used globally.

#### ARIIA:

- The ARIIA will primarily focus on 5 main parameters:

# VETRII'S UPSC PIB – August -2018

- Budget expenses and revenue generated through innovation and entrepreneurship development
- Facilitating access to advance centres/ facilities and entrepreneurial support system
- Idea to Entrepreneurship
- Development of Innovation Ecosystems supported through teaching and learning
- Best innovative solutions developed in-house for improving governance of your institution

## Key Highlights:

- All recognised Indian education institutions are eligible to participate in the ARIIA ranking.
- The ARIIA parameters have been primarily organised in 5 broad heads, which will be further elaborated into suitable sub-heads.
- Each broad head will have an overall weight assigned to it and accordingly, the various subheads will be assigned appropriate weight distribution.
- To ensure transparency in the ranking system, an attempt will be made to identify the relevant data needed to suitably measure the performance score under each sub-head.
- The main emphasis will be on identifying the data that the institution can easily provide or which is easy to obtain from third-party sources and easily verifiable, wherever verification is necessary.
- The overall score will be calculated based on the weights allotted to each head. The maximum value of the score will be 100.
- The institutions will be issued ranks on the basis of their overall score.

## Innovation Cell:

- The main objective of the cell would be to encourage, inspire and nurture young students by exposing them to new ideas and processes resulting in innovative activities in their formative years, which will be fostered through a network of innovation clubs in higher educational institutions.

## Key Details:

- The cell has been established at the All India Council for Technical Education (AICTE) in New Delhi to systematically foster the culture of innovation in all Higher Education Institutions (HEIs) across the country.
- It would be headed by a scientist and will comprise a senior ministry official and a host of young professionals.
- The cell's establishment comes after India's ranking in the Global Innovation Index ranking improved significantly from 66 in 2016 to 57 in 2018, among a total of 127 countries.

## INTERNATIONAL/ INDIAN RELATIONS

### US GIVES INDIA STRATEGIC TRADE AUTHORISATION-1 STATUS

**GS2: IR | Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests**

**Prelims level: STA-1 / Mains level: India-US defence relations**

## Why in News?

- United States has designated India as **Strategic Trade Authorization-1 (STA-1)** country that will allow India to buy highly advanced and cutting-edge sensitive technologies from America.

## What is Strategic Trade Authorisation (STA)?

- STA allows for license exception with regards to exports from the US.
- This type of US government authorisation allows a certain item to be exported under defined conditions without a transaction-specific license.
- Currently there are 36 countries on STA-1 list.
- India is only South Asian country to be on the list. Till recently, India was classified as an STA-2 country along with seven others.
- Other Asian countries designated as STA-1 are Japan and South Korea.

## Why is the STA-1 important for India?

- STA-1 provides India with greater supply chain efficiency, both for defence, and for other high-tech products.

# VETRII'S UPSC PIB – August -2018

- The status eases export controls for high technology product sales to India, granting it the same access as NATO allies – Australia, Japan and South Korea.
- Under STA-1, India and US have reached understanding under which India will receive license-free access to a wide range of dual-use technologies in conjunction with the steps that India has committed to take to advance its export control objectives.
- STA-1 treatment will expand the scope of technology exports subject to Export Administration Regulations (EAR) that can be made to India without individual licenses.
- It will further enhance the bilateral defence trade relationship and result in a greater volume of US exports to India.
- India's inclusion is beneficial mostly for the purposes of increasing the speed of sale of high-tech defence and non-defence products that are otherwise subjected to strict controls and licensing.
- Now, India can get easy access to latest defence technologies, with the reduction of the number of licenses needed for exports from the US.
- According to analysts, it is also a boost for the foundational Communications, Compatibility and Security Agreement (COMCASA).

## What are the benefits that are seen for India & US?

- This new designation reflects India's membership in three of four multilateral export control regimes, as well as the development of its national export control system.
- It will allow US companies to more efficiently export much wider range of products to Indian high technology and military customers.
- It will benefit US manufacturers while continuing to protect its national security.
- It will provide India greater supply chain efficiency, both for defence and for other high-tech products that will increase activity with US systems, interoperability of systems and will reduce time and resources needed to get licensing approved.
- It will improve India's partnership with the United States to improve its own export control regimes and has met most of the export control rules which the US thinks is useful.
- It will also be a competitive advantage for US, in terms of supplying those kinds of products to India.



## Way Forward:

- India and the United States share an interest in countering China's expanding economic and military weight and the United States has emerged as a top arms supplier to India, selling more than \$15 billion of weapons over the past decade as New Delhi modernizes its Soviet-era military.
- Looking at current exports from the US to India, 50% of those are eligible now under STA-1. This can free up \$2.1 billion in trade, make US exporters more competitive in the global marketplace, help provide India more advanced US technology.
- The move is a sign of trust not only in the relationship but also on India's capabilities as an economic and a security partner.
- This is because it also presupposes that India has the multilateral export control regime in place, which would allow the transfer of more sensitive defense technologies and dual use technologies to India and without the risk of any proliferation.
- Currently, 36 countries, mostly all NATO nations, have this status, so it's a very elevated status from an export control point of view.

## WHO LAUDS INDIA'S COMMITMENT TO ACCELERATED SANITATION COVERAGE

### GS 2: IR | Important International institutions

Prelims Level: Swachh Bharat Mission (Gramin) initiative and Particulars / Mains Level:

Clean India Mission - Sanitation coverage in rural India

### Why in News?

- The World Health Organization (WHO) has released a progress report on potential health impact from increased sanitation coverage through the Swachh Bharat Mission- Gramin (SBM-G).

### Highlights:

- India's rural sanitation coverage has escalated to 89.07 percent by August 2, 2018.
- Under the Swachh Bharat Mission (Gramin), 19 States and Union Territories were declared Open Defecation Free (ODF) and 7.9 crore toilets were built, while 421 districts



were declared ODF. More than 4.9 lakh villages in the country were also declared Open Defecation Free.

- As per the study, unsafe sanitation, before the initiation of SMB-G, had caused 199 million cases of diarrhea every year and that of today, the initiative aims to achieve 100 percent sanitation coverage.
- The report further estimated further, that 14 million Disability Adjusted Life Years (DALYs) can be avoided between 2014 and 2019. WHO estimation of health impacts is based on comparative risk assessment (CAR) methods.

### Swachh Bharat Mission Gramin:

- Swachh Bharat Mission (SBM) was launched on 2nd October 2014, accelerating the efforts to achieve universal sanitation coverage and to put the focus on sanitation.
- Swachh Bharat Mission comprises of two Sub-Missions – the Swachh Bharat Mission (Gramin) and the Swachh Bharat Mission (Urban).
- Mission's aim is to achieve a 'Swachh Bharat' by 2019, as a fitting tribute to Mahatma Gandhi on his 150th birth anniversary.

### Significance of the mission:

- As the initial results of a WHO modeling study on the health impact of the Swachh Bharat Mission Gramin (SBM-G) outline, India's accelerated coverage of safe sanitation services, and its determination to end open defecation, will have a substantial effect on the burden of diarrheal diseases and PEM by reducing mortality and accumulative Disability Adjusted Life Years (the sum of the years of life lost due to premature mortality and years lost due to disability or ill-health).

### Health Impact:

- The broader health impact of India's commitment to accelerated sanitation coverage is significant.
- It includes improved overall nutritional status and reduced incidence of infectious diseases such as neglected tropical diseases and acute respiratory infections, as well as vector-borne diseases.

- Moreover, the estimations apply to the health impacts from improvements in sanitation coverage only, meaning it is possible that the broader Mission has produced additional health gains through changes in personal hygiene and the consumption of safe drinking water.

## Sanitation coverage India's Commitment:

- India's commitment and progress towards these outcomes are reflected in the fact that household sanitation coverage has dramatically increased from an estimated 2% per year before the initiative to more than 13% annually between 2016 and 2018.
- The recent allocation of up to INR 15,000 crore as Extra Budgetary Resources for the SBM-G during the present financial year holds-out the potential for further gains, not only for India, but also the WHO's South-East Asia Region and the world (globally, diarrheal disease is the second leading cause of under-five mortality, while lack of clean water and sanitation is also a major contributor to malnutrition).

## Making of the Report:

- WHO has worked closely with the Government of India (GoI) to scale up access to sanitation services, by providing technical assistance through India's participation in the 'Global Analysis and Assessment of Sanitation and Drinking-Water Survey 2017', as well as working with partners to support the GoI implementation of WHO's guidelines for safe water and sanitation planning.
- WHO has also supported the piloting of TrackFin (Tracking financing to sanitation, hygiene, and drinking-water) in Rajasthan and West Bengal to utilize resources more efficiently for reaching those under threat of being left behind.

## Way forward for India:

- According to the calculations, if all the sanitation services are used and schemes are effectively implemented, the initiative could result in over 14 million more years of healthy life in the period measured, with the benefits accruing yearly thereafter.
- This is especially remarkable, given that before 2014 unsafe sanitation caused an estimated 199 million cases of diarrhoea annually,

- With the modelling that shows the problem will almost be eliminated when the universal use of safe sanitation facilities is achieved.

## Conclusion:

- Inadequate sanitation has dire consequences for public health, education, poverty, and growth. A disease like stunting amongst children, the death of an infant, diarrhoea can be prevented through good sanitation. Better sanitation helps to break the fecal-oral transmission route that impacts public health and is beneficial for the household and the community. Cross-country studies show that sanitation is the strongest determinant of child survival and improvement in sanitation is accompanied by a reduction in child mortality.
- Swachh Bharat Mission is emerging as the biggest, most successful behaviour-change campaign of the world. The mission has given multiple benefits, just not for the society but for the whole economy and if it is further implemented effectively, it is sure to uplift India's image in the world.

## EXERCISE SCO PEACE MISSION 2018

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

**Prelims level: Shanghai Cooperation Organization (SCO) / Mains level: Defence cooperation under SCO**

## Why in News?

- As part of Shanghai Cooperation Organization (SCO) initiatives, SCO Peace Mission Exercise is conducted biennially for SCO member states.
- This will be a historic occasion due to the maiden participation of India post becoming a full member of the SCO in June 2017.

## Significance of this exercise:

- This exercise marks a major milestone in the multilateral relations of SCO member nations.

- It will involve tactical level operations in an international counter insurgency or counter terrorism environment under SCO Charter.
- The joint exercise will strengthen mutual confidence, interoperability and enable sharing of best practices among armed forces of SCO Nations.
- It will be a landmark event in the history of SCO defence cooperation where Indian and Pakistani armed forces will participate together.

## PORTAL G20 DIGITAL ECONOMY MINISTERIAL MEETING

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

**Prelims Level: About G20 and an overview of various meetings. / Mains Level: Significance of G20 in world economy.**

### Why in News?

- The G20 Digital Economy Ministerial Meeting was held in Salta, Argentina from 23 to 24 August, 2018. It took place as part of Sherpa Track for 2018 G20 Leaders' Summit, which is to be hosted by Argentina by end of 2018.
- The theme of the meeting was 'Building consensus for fair and sustainable development'.
- The ministerial meeting was preceded by the second meeting of the G20 Digital Economy Task Force and has identified three key issues for the agenda: the future of work, infrastructure for development, and a sustainable food future.

### Digital Economy Task Force:

- The Digital Economy Task Force (DETF) was established under the 2017 German presidency, based on the decision adopted in Hangzhou in 2016 under the Chinese Presidency.
- In Antalya, under the Turkish presidency in 2015, G20 leaders recognized the modern period as a critical era of digital transformation, influenced by the advent of new technologies as key elements for economic development.

## What is Digital economy?

- The digital economy refers to a broad range of activities which include: the use of knowledge and information as factors in production, information networks as a platform for action, and how the information and communication technology (ICT) sector spurs economic growth.

## Challenges to digital economy:

- Important challenges include providing high-speed internet for all by 2025, creating inclusive growth and new jobs through digital trade, promoting lifelong digital learning, and closing the gender gap.

## Significance:

- In 2008, amidst the global financial crisis, the world saw a need for new consensus-building at the highest political level. Since then, the G20 summits have been attended by heads of state or government, and the G20 was instrumental in stabilizing the world economy. Since then, its agenda has expanded to include additional issues affecting financial markets, trade, and development.

## The work of the G20 is generally divided into two tracks:

- The Finance track comprises all meetings with G20 finance ministers and central bank governors and their deputies. Convening several times throughout the year, they focus on financial and economic issues, such as monetary, fiscal and exchange rate policies, infrastructure investment, financial regulation, financial inclusion and international taxation.
- The Sherpa track focuses on broader issues such as political engagement, anti-corruption, development, trade, energy and climate change, gender equality, among others. Each G20 country is represented at these meetings by its relevant minister, and by its designated sherpa, or emissary. The sherpa engages in planning, negotiation and implementation tasks on behalf of the leader of their respective country. Each sherpa orients their minister and head of state or government accordingly on the progress of the G20, and delegates the dialogue and topics to relevant working groups.

## INDIAN NAVAL SHIP EXERCISE KAKADU 2018

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

**Prelims level: Exercise Kakadu / Mains level: Participation of India in various bilateral and multilateral military exercises**

### Why in News?

- Indian Naval Ship Sahyadri has reached Port of Darwin, Australia to participate in multilateral regional maritime exercise KAKADU 2018 conducted by Australia.
- The ship was earlier deployed in South China Sea and Pacific Ocean for over four months and had represented Indian Navy in **multinational exercises MALABAR 18 at Guam and RIMPAC 18 at Hawaii.**

### Exercise KAKADU:

- It is premier multilateral regional maritime engagement hosted by **Royal Australian Navy (RAN) and supported by Royal Australian Air Force (RAAF).**
- It was started in 1993. It is held biennially in Darwin and Northern Australian Exercise Areas (NAXA).
- Exercise KAKADU derives its name **from Kakadu National Park**, which is protected area in the northern territory of Australia and located 171 km south-east of Darwin.
- During the exercise, professional exchanges in harbour and diverse range of activities at sea, including complex surface, sub-surface and air operations would enable sharing of best practices and honing of operational skills.

### KAKADU 2018:

- Indian Navy's participation in KAKADU 18 provides an excellent opportunity to engage with regional partners and undertake multinational maritime activities ranging from constabulary operations to high-end maritime warfare in a combined environment
- It is aimed at enhancing interoperability and development of common understanding of procedures for maritime operations.

# VETRII'S UPSC PIB – August -2018

- 
- KAKADU 2018 is fourteenth edition of exercise scheduled to be held between August 29 and September 18, 2018.
  - It will see participation of 23 warships, one submarine, 45 aircraft, 250 marines and approximately 52 foreign staff from over 25 different countries including India and china.