POLITY AND GOVERNANCE

1. LOCATION TRACKING DEVICES, EMERGENCY BUTTONS MANDATORY FOR NEW PUBLIC SERVICE VEHICLES
2. COMPANIES AMENDMENT (ORDINANCE), 2018
3. COMPETITION COMMISSION OF INDIA
4. REGIONAL CONNECTIVITY SCHEME
5. NEW RULES FOR FOREIGNERS IN DETENTION CENTRES
6. EC ISSUES ORDER ON POLL EXPENSES
7. NO DOUBLE JEOPARDY BAR IF THERE WAS NO TRIAL: SUPREME COURT
8. ADVANCED MOTOR FUELS TECHNOLOGY COLLABORATION PROGRAMME
9. ISPRL SIGNS MOU WITH ADNOC TO EXPLORE STORAGE OF CRUDE OIL AT PADUR
10. PLEA TO LIFT BAN ON GOVT. STAFF JOINING RSS ACTIVITIES
11. GLOBAL DIGITAL CONTENT MARKET 2018
12. YUVA SAHAKAR-COOPERATIVE ENTERPRISE SUPPORT AND INNOVATION SCHEME
13. MNRE CIRCULATES DRAFT INDIAN WIND TURBINE CERTIFICATION SCHEME (IWTCS)
14. SWADESH DARSHAN SCHEME
15. SC PULLS UP STATES FOR NOT RECRUITING JUDGES
16. RAMAYANA EXPRESS
17. WEST BENGAL GETS A NEW LOKAYUKTA
18. J AND K ALL SET FOR PRESIDENTS RULE
19. SC TO DIRECT STATES TO IMPLEMENT DRAFT WITNESS PROTECTION SCHEME
20. UNION HRD MINISTRY LAUNCHES INSTITUTION’S INNOVATION COUNCIL (IIC)
21. CABINET APPROVES EXTENSION COMMISSION’S TERM TO EXAMINE ISSUE OF SUB-CATEGORISATION OF OBCS
22. QUADRICYCLES
23. CONSTITUTION DAY
24. ARTICLE 370
25. EMERGENCY RESPONSE SUPPORT SYSTEM (ERSS)

INTERNATIONAL RELATIONS

1. UNITED NATIONS WORLD TOURISM ORGANIZATION (UNWTO)
2. INTERNATIONAL SOLAR ALLIANCE (ISA)
3. MOU AMONGST BRICS NATIONS
4. DHARMA GUARDIAN
5. TURGA HYDEL PROJECT
6. SWIFT
7. 18TH INDIAN OCEAN RIM ASSOCIATION COUNCIL OF MINISTERS MEETING
8. INDIA RE-ELECTED AS MEMBER OF ITU COUNCIL TILL 2022
9. WORLD BANK INKS $172 MILLION PROJECT AGREEMENT WITH AP
10. ASEAN MEMBER COUNTRIES OF RCEP OFFER INDIA CONCESSION
11. NOT IN DIRECT TALKS WITH TALIBAN: MEA
12. U.S. EXEMPTS CHABAHAR PORT WORK FROM SANCTIONS
13. INDIA TO EXPORT SUGAR TO CHINA
14. CHINA TAPS INDIA AS DIGITAL ECONOMY PARTNER
15. INDIAN WAR MEMORIAL UNVEILED IN FRANCE
16. SIMBEX-2018
17. SAMUDRA SHAKTI – 2018
18. 10TH ANNIVERSARY OF IONS
19. INDIA VOTES AGAINST UNGA DRAFT RESOLUTION ON USE OF DEATH PENALTY
20. INDIA TO JOIN ‘QUAD’ TALKS IN SINGAPORE
21. INDIA TO TOP US AS 2ND-LARGEST CARBON Emitter FROM POWER: INTERNATIONAL ENERGY AGENCY

22. 13TH EAST ASIA SUMMIT

23. INDIAN ARMY ZEROES IN ON RUSSIAN IGLA-S MISSILE

24. 4-DAY REGIONAL MEETING OF WORLD CUSTOMS ORGANISATION HELD IN JAIPUR

25. INDIA, PAK COMMIT TO KARTARPUR CORRIDOR

26. INDO-US JOINT MILITARY EXERCISE ‘VAJRA PRAHAR’ COMMENCES IN JAIPUR

ECONOMY
1. NO ‘LESS CASH’ TWO YEARS POST NOTE BAN

2. DREDGING CORPORATION OF INDIA

3. FLIPKART, AMAZON NOT VIOLATING NORMS: CCI

4. STRATEGIC PETROLEUM RESERVES (SPR)

5. CREDIT GROWTH AT 5-YEAR HIGH

6. PRIME MINISTER LAUNCHES EASE OF DOING BUSINESS GRAND CHALLENGE

7. 50% ATMS WILL BE SHUT BY 2019 INDUSTRY BODY

8. SEBI SIMPLIFIES REGULATIONS FOR RECLASSIFYING PROMOTER AS PUBLIC INVESTOR

9. NBFC MUDRA LOANS GREW FASTER THAN BANKS IN FY18: REPORT BY MUDRA

10. 10.19TH MEETING OF THE FINANCIAL STABILITY AND DEVELOPMENT COUNCIL (FSDC)

11. INDIA AT 77 RANK IN WORLD BANK’S DOING BUSINESS REPORT, 2018

12. SEYCHELLES ISSUES WORLD’S 1ST ‘BLUE BOND’

13. EASE OF DOING BUSINESS GRAND CHALLENGE

14. PM LAUNCHES HISTORIC SUPPORT AND OUTREACH INITIATIVE FOR MSME SECTOR

15. COMPANIES AMENDMENT (ORDINANCE), 2018

16. INSPIRE 2018 / ENERGY EFFICIENCY SERVICES LIMITED (EESL)

17. MEGA FOOD PARK SCHEME

18. AIRSEWA 2.0

19. INDIA SKILLS REPORT 2019

20. PAiSA PORTAL

21. LOGIX INDIA -2019

22. GLOBAL WAGE REPORT 2018

23. INDIA–CHINA AMENDS DOUBLE TAXATION AVOIDANCE TREATY

24. INCLUSIVE WEALTH REPORT 2018

ENVIRONMENT AND ECOLOGY
1. PALAU, REEF CONSERVATION

2. RECOVERING OZONE LAYER

3. POINT CALIMERE WLS

4. HIMALAYAN STATE REGIONAL COUNCIL

5. ELEPHANT CORRIDORS IN INDIA / LEGAL PROTECTION OF ELEPHANT CORRIDORS AND THEIR HABITATS

6. BASIC COUNTRIES

7. ACROSS SCHEME

8. WILDLIFE CRIME DATABASE MANAGEMENT SYSTEM

9. STRATOSPHERIC AEROSOL INJECTION (SAI)

10. DUDHWA TIGER RESERVE

11. INDIAN OWL FESTIVAL

SCIENCE AND TECHNOLOGY
1. RAILWAYS ROLLS OUT ALL-INDIA UNRESERVED MOBILE TICKETING FACILITY (UTS ON MOBILE)
2. INDIA CONDUCTS SUCCESSFUL NIGHT TRIAL OF NUCLEAR-CAPABLE AGNI-I MISSILE .....65
3. INDIAN NAVY’S DEEP SUBMERGENCE RESCUE VESSEL (DSRV) CAPABILITY ........66
4. DAWN MISSION / NASA ...........................................67
5. ASTROSAT NASA-ISRO COLLABORATION .............................67
6. NASA’S KEPLER SPACE TELESCOPE ..........68
7. INDIA ANNOUNCES COMPLETE NUCLEAR DETERRENCE .......................68
8. GUIDELINES FOR OPERATION GREENS ....69
9. TIANGONG / INTERNATIONAL SPACE STATION ....................................70
10. ARTIFICIAL NEURON NETWORK, SPINNAKER ........................................71
11. GSAT 29, GSLV MK III ..................................72
12. DECISION SUPPORT SYSTEM (DSS) ....73
13. GROWTH INDIA TELESCOPE, SUPERNOVAE ........................................74
14. CHANDRAYAAN-2 ........................................75
15. INSIGHT, NASA’S MISSION ........................................76
16. MISSION RAKSHA GYAN SHAKTI..................................77
17. CRISPR-CAS9, GENE EDITING ........................................77
18. ISRO HAS SUCCESSFULLY LAUNCHED THE PSLV-C43/HYSIS .........................79

SOCIAL
1. SAFE CITY PROJECT ........................................80
2. IIT KARAGPUR, UNIVERSITY OF AUCKLAND INK PACT FOR RESEARCH TIE-UP ........80
3. MORE COUNTRIES PARTNER TO TARGET ‘ZERO HUNGER’ IN GLOBAL SOUTH ......81
4. INDIA’S OWN ‘SMOG TOWER’ MAY HELP COMBAT AIR POLLUTION .................81
5. WATER ATMS MAY HELP IN BRIDGING SAFE WATER GAP ..........................82
6. PILOT GANGA GRAMS WILL BE THE ROLE MODEL FOR VILLAGE CLEANLINESS ....83
7. AYUSH-HEALTH MANAGEMENT INFORMATION SYSTEM (A-HMIS) .....................83
8. UN WORLD FOOD PROGRAMME, ALIBABA GROUP PARTNERED TO ELIMINATE HUNGER .........................................................84
9. POOR DIET BIGGER HEALTH HAZARD THAN KILLER DISEASES: UN BODY ........85
10. GLOBAL IT CHALLENGE FOR YOUTH WITH DISABILITIES, 2018 .................85
11. MOST CHILD DEATHS DUE TO PNEUMONIA IN INDIA.................................86
12. INDIA SLIPS IN GLOBAL RTI RATINGS ..........87
13. NATIONAL BODY SET UP TO STUDY A RARE FORM OF DIABETES .........................87
14. HRD MINISTRY LAUNCHES LEAP AND ARPIT FOR HIGHER EDUCATION FACULTY ...88
15. NITI AAYOG, UNICEF LAUNCHES UNICEF-ATAL TINKERING LAB HACKATHON ..........89
16. HARVESTING GREEN FUEL FROM WASTEWATER ........................................90
17. THERE CAN’T BE A BAN ON USE OF WORD ‘DALIT’ IN MEDIA: PCI .........................90
18. KERALA INTRODUCES NEW OPEN ONLINE LEARNING PROGRAMME- ‘KOOOL’ ........91
19. GLOBAL FIGHT ON MALARIA STALLED: WHO ........................................91
20. ICMR RELEASES GUIDELINES FOR ANTIBIOTICS’ JUDICIOUS USE .................92
21. HIMACHAL GOVT APPROVES SASHAKT MAHILA YOJNA ..................................93
22. UP GOVT LAUNCHES NARI SASHAKTIKARAN SANKALP ABHIYAN ....................93
23. UN SELECTS NOIDA TO PARTICIPATE IN GLOBAL SUSTAINABLE CITIES 2025 PLAN ............................................................94
24. HEALTH MINISTRY LAUNCHES HEALTH INFORMATION PLATFORM TO MONITOR PUBLIC HEALTH SURVEILLANCE .........................95

ART AND CULTURE
1. RENAMING OF JHARSUGUDA AIRPORT IN ODISHA ........................................96
2. KARNATAKA GOVT. FIRM ON TIPUJAYANTHI ........................................96
3. GUJARAT GOVERNMENT WANTS TO RENAME AHMEDABAD AS KARNAVATI
4. UNESCO ASIA-PACIFIC AWARD FOR CONSERVATION
5. BURIAL URN OF MEGALITHIC ERA UNEARTHED IN KERALA
6. RS 75 COMMEMORATIVE COIN TO MARK ANNIVERSARY OF TRICOLOUR HOISTING BY BOSE
7. RANILAXMIBAI
8. KAMBALA
9. SENTINELESE TRIBE
10. SANGAI TOURISM FESTIVAL
11. JALLIANWALA BAGH MASSACRE
12. CHARDHAM PROJECT

OTHERS
1. LADAKH RESTORATION PROJECT WINS UNESCO AWARD
2. DELHI POLICE LAUNCHES E-LEARNING PORTAL: 'NIPUN'
3. HIMACHAL FLAGS OFF ‘STARTUP VAN’ FOR YOUTH
4. LITERACY LEVELS IN RURAL INDIA SUFFER DUE TO MIGRATION, FINDS UNESCO STUDY
5. INDIA SLIPS TWO PLACES TO 53RD POSITION ON GLOBAL TALENT RANKING
6. ICGS VARAHA
7. BORDER AREA DEVELOPMENT PROGRAMME (BADP)
8. WORLD’S FIRST AI NEWS ANCHOR DEBUTS IN CHINA
1. LOCATION TRACKING DEVICES, EMERGENCY BUTTONS MANDATORY FOR NEW PUBLIC SERVICE VEHICLES

Why in news?
The Ministry of Road Transport & Highways vide notification has mandated that all new public service vehicles except auto rickshaws and eRickshaws, registered on and after 1st January 2019, will have to be equipped with Vehicle Location Tracking (VLT) with emergency buttons.

Highlights
- The VLT device manufacturers would assist in providing the back end services for monitoring the device. With such regulation, the Ministry aims to ensure safety of passengers especially women.
- Operational procedure for implementation of VLT cum Emergency buttons
- The Ministry has sent an advisory to all the states as well in this regard. The States are required to ensure execution of this order and check fitment and functional status of the VLT device in the public service vehicles at the time of checking of the vehicles for fitness certification.
- Command and Control Centres will be setup by the State or VLT manufacturers or any other agency authorised by the State Government.
- These centres will provide interface such as state emergency response centre, the transport department or Regional Transport Offices and its designated agencies.
- These centres will also provide feed to the ‘VAHAN’ data base or the relevant data base of the State with regard to the over speeding device ‘healthstatus’.
- The details of each VLT device will be uploaded on the VAHAN database by the VLT device manufacturer using its secured authenticated access.
- The VLT device manufacturers or their authorised dealers will install the VLT devices in public service vehicles and register the devices along with details of vehicle on the corresponding backend systems in real-time.
- The public service vehicle owners have to ensure that the VLT devices installed in their vehicles are in working condition and regularly send required data to the corresponding backend system.
- VLT device manufacturers will get their devices tested for conformity of production every year after the first certification from the testing agencies referred to in Rule126 of the Central Motor Vehicles Rules, 1989.
- The testing agencies will upload the details of the VLT devices certified by them on the VAHAN database.
- The State or Union Territories will publish Internet Protocol address (IP address) and Short Message Service Gateway (SMS gateway) details of their respective emergency response system where VLT devices will send the emergency alerts on press of emergency button.
- VAHAN: The Integrated Solution for Vehicle Registration
- VAHAN is a highly flexible and comprehensive system that takes care of all the activities of Vehicle Registration, leaving the Transport Department to deal with more important business issues.
- The software enables the processes at RTO/DTO/MLO/SDM involving vehicle registration, fitness, taxes, permits and enforcement to get computerised.
- The State Transport Department is governed by both Central Motor Vehicle Regulation (CMVR) and state specific Motor Vehicle Regulation (State MVR). Consequently, VAHAN
was conceptualized as a product that would capture the functionalities as mandated by CMVR as well as state MVRs.

2. COMPANIES AMENDMENT (ORDINANCE), 2018

Why in news?
The recommendation of the Union Cabinet for promulgation of the Companies Amendment (Ordinance), 2018 has been assented to by the President of India. The Ordinance is promulgated to review offences under the Companies Act, 2013.

Highlights
- Shifting of the jurisdiction of 16 types of corporate offences from the special courts to in-house adjudication, which is expected to reduce the case load of Special Courts by over 60%, thereby enabling them to concentrate on serious corporate offences.
- The penalty has been reduced to half for small companies and one person companies of that applicable to normal companies.
- Instituting a transparent and technology driven in-house adjudication mechanism on an online platform and publication of the orders on the website.
- Strengthening in-house adjudication mechanism by necessitating a concomitant order for making good the default at the time of levying penalty, to achieve the ultimate aim of achieving better compliance.
- Declogging the NCLT by enlarging the pecuniary jurisdiction of Regional Director by enhancing the limit up to Rs. 25 Lakh as against earlier limit of Rs. 5Lakhunder Section 441 of the Act;
- Vesting in the Central Government the power to approve the alteration in the financial year of a company under section 2(41); and
- Vesting the Central Government the power to approve cases of conversion of public companies into private companies.

3. COMPETITION COMMISSION OF INDIA

Why in news?
National Conference on Public Procurement and Competition Law is being organised by the Competition Commission of India (CCI) with a view to scale up Competition Advocacy and reach out to important stakeholders in public procurement ecosystem. The National Conference is being organised in association with Indian Institute of Corporate Affairs (IICA), a think tank under the aegis of Ministry of Corporate Affairs.

Objectives of the commission:
- To prevent practices having adverse effect on competition.
- To promote and sustain competition in markets.
- To protect the interests of consumers.
- To ensure freedom of trade.

Competition Commission of India
The Competition Commission of India (CCI) was established under the Competition Act, 2002 for the administration, implementation and enforcement of the Act, and was duly constituted in March 2009. Chairman and members are appointed by the central government.
4. REGIONAL CONNECTIVITY SCHEME

Why in news?
Opening the third round of the Regional connectivity scheme (RCS), the Ministry of Civil Aviation has invited proposals for air routes that include tourist destinations. The deadline for submitting applications is November 20.
Under this scheme, the government has allowed seaplanes to operate commercial passenger flights. Included among the 10 destinations that the government proposes to connect through seaplanes are the recently unveiled Statue of Unity at Sardar Sarovar Dam, Sabarmati Riverfront in Ahmedabad, Tehri Dam in Uttarakhand and Nagarjuna Sagar in Telangana.

UDAN (Ude Desh ka Aam Nagrik) scheme:
- UDAN(Ude Desh Ka Aam Nagrik) is the Government’s initiative to make air travel to India’s tier II and tier III cities affordable to the aam aadmi.
- The idea is to put smaller cities and remote regions on the aviation map, by getting domestic airlines to ply more regional routes.
- Under the scheme, the Government offers incentives to airlines to flag off new flights to neglected smaller cities and towns by providing Viability Gap Funding to make these operations profitable. Airlines are required to bid for exclusive rights to fly on the regional routes opened up under the scheme.
- They must sell a specific number of seats on each flight at a fixed fare of 2,500rs for one hour of flying. In the case of helicopter operations, allowed for the first time now, fares are capped at 2,500rs for a 30-minute flight.

5. NEW RULES FOR FOREIGNERS IN DETENTION CENTRES

Why in news?
The government has informed the Supreme Court that new guidelines are being framed for keeping foreign nationals in detention centres across the country.

Highlights
- The issue of framing of detention manual for keeping foreign nationals had cropped up when the apex court was hearing a matter related to the condition of detention centres in Assam.
- The apex court had recently expressed displeasure that foreign nationals kept in detention centres in Assam were “separated” from their families and had asked the state to look into the issue with urgency so that the families are “not broken up”.
- The court observed it was “inappropriate” to keep the families separated without any valid reason.
- The Centre had told the apex court that it was in the process of framing guidelines for keeping foreign nationals in detention centres across the country and the process would take around three months.

6. EC ISSUES ORDER ON POLL EXPENSES

Why in news?
The costs incurred on publicising information about the criminal cases against a candidate, as recently directed by the Supreme Court, will be counted as part of poll expenditure, according to the Election Commission.
Highlights
- The expenses will be borne by the candidate and the political parties. “This being an expenditure made in connection with the election, if expense is incurred in this regard, the same will be counted for the purposes of election,” said the EC.
- There is no limit on the party election expenditure. For Assembly polls, the cap on expenses by the candidates is between Rs. 20 lakh to Rs. 28 lakh.
- The Commission said the FIR cases have to be given publicity. Revised status if after filing the nomination, the status of the criminal case changes, it will be open to the candidate to notify the revised status to the Returning Officer and publish the revised status.
- Separate formats have been specified by the Commission for the candidates and the political parties.

7. NO DOUBLE JEOPARDY BAR IF THERE WAS NO TRIAL: SUPREME COURT

Why in news?
The bar of double jeopardy does not arise if an accused was discharged of a criminal offence, even before the commencement of trial, on the basis of an invalid sanction for prosecution, the Supreme Court has held.

Highlights
- Article 20 (2) of the Constitution mandates that a person cannot be prosecuted or punished twice for the same offence.
- A Bench of Justices R. Banumathi and Indira Banerjee held in a judgment that if an accused has not been tried at all and convicted or acquitted, the principles of double jeopardy cannot be invoked at all.
- If an earlier order of sanction was found to be invalid, there is no bar for the competent authority to issue a proper order of sanction for prosecution.
- The courts are not to quash or stay the proceedings under any Act merely on the ground of an error, omission or irregularity in the sanction granted by the authority unless it is satisfied that such error, omission or irregularity has resulted in failure of justice, the SC observed.

Article 20
- The Article 20 is one of the pillars of fundamental rights guaranteed by the Constitution of India.
- It mainly deals with protection of certain rights in case of conviction for offences. When an individual as well as corporations are accused of crimes, the provisions of Article 20 safeguard their rights.
- The striking feature of the Article 20 is that it can’t be suspended during an emergency period. The Article has set certain limitations on the legislative powers of the Union and State legislatures.

Background
- The corruption case was filed by the Aizawl police in February 2009 for misappropriation of public money. During inquiry, it was detected that the respondent had acquired valuable assets disproportionate to known sources of income.
- The first invalid sanction for prosecution was issued by the Commissioner-Secretary, Department of Personnel & Administrative Reforms (DP & AR) directly without the Governor’s approval. Following the discharge of the accused by the special court, the Governor accorded a fresh sanction in December 2013.
• The judgment is based on an appeal filed by the State of Mizoram against an order passed by the Gauhati High Court in August 2015. It upheld a Special Court decision to decline to entertain a second chargesheet filed in a corruption case against the accused, Dr. C. Sangnghina, on the ground of double jeopardy.

Ex Post Facto Legislation
• The clause (1) of Article 20 protects individuals against ex post facto legislation, which means no individual can be convicted for actions that were committed before the enactment of the law.
• In other words, when a legislature declares an act to be an offence or provides a penalty for an offence, it can't make the law retroactive so as to prejudicially affect the individuals who have committed such acts prior to the enactment of that law.

Immunity from Double Punishment
• The Constitution of India prohibits double punishment for the same offence. That is reflected in the clause (2) of Article 20, which safeguards an individual from facing multiple punishments or successive criminal proceedings for the same crime. According to this clause, no person shall be prosecuted and punished for the same offence more than once.
• If someone has been put on trial and punished in a previous proceeding of an offence, he can't be prosecuted and punished for the same proceedings of an offence again in subsequent proceeding. If any law provides for the double punishment, it will be considered void.
• Although Article 20 disapproves of the doctrine of ‘Double Jeopardy’, it does not give immunity from proceedings before a court of law or tribunal. Hence, a public servant who has been punished for an offence in a court of law may yet be subjected to departmental proceedings for the same offence.
• It is to be noted that Article 20 provides protection against double punishment only when the accused has been ‘prosecuted’ and ‘punished’ once. Also, the Article does not prevent subsequent trial and conviction for another offence even if the two offences have some common aspects.

Immunity from Self-Incrimination
• The immunity from self-incrimination is conferred in the Article 20(3) of the constitution which states that the accused can never be compelled to be a witness against himself. In short, no individual can be forced to accuse himself.
• The scope of this immunity has, prima facie, been widened by the Supreme Court by interpreting the word ‘witness’ as inclusive of both oral and documentary evidence. Hence, no person can be compelled to furnish any kind of evidence, which is reasonably likely to support a prosecution against him. This ‘Right to Silence’ is not called upon in case any object or document is searched and seized from the possession of the accused. For the same reason, the clause does not bar the medical examination of the accused or the obtaining of thumb-impression or specimen signature from him.
• This immunity is only limited to criminal proceedings.
• The Article 20 (3) can be rightfully used as an anchor only by those accused of an offence and against whom an FIR has been lodged, which in normal course would result in prosecution.
Why in news?
The Union Cabinet chaired by the Prime Minister has been apprised of India joining as Member of Advanced Motor Fuels Technology Collaboration Programme (AMF TCP) under International Energy Agency (IEA). AMF TCP works under the framework of International Energy Agency (IEA) to which India has "Association" status since 30th March, 2017.

Highlights

• The primary goal of joining AMF TCP by Ministry of Petroleum & Natural Gas (MoP&NG) is to facilitate the market introduction of Advanced motor fuels/ Alternate fuels with an aim to bring down emissions and achieve higher fuel efficiency in transport sector.

• AMF TCP also provides an opportunity for fuel analysis, identifying new/ alternate fuels for deployment in transport sector and allied R&D activities for reduction in emissions in fuel intensive sectors.

• The R&D work in AMF TCP is carried out within individual projects called "Annex". Over the years, more than 50 Annexes have been initiated in AMF TCP and a number of fuels have been covered in previous Annexes such as reformulated fuels (gasoline & diesel), biofuels (ethanol, biodiesel etc.), synthetic fuels (methanol, Fischer- Tropsch, DME etc.) and gaseous fuels.

• R&D Institutions of Public sector Oil Marketing companies and Automobile Testing Agencies such as ARAI, CIRT, ICAT etc. have State-of-the-art facilities and resources will also be a contributor to the Annex(s) participated by MoP&NG.

• Prime Minister at UrjaSangam, 2015 had directed to reduce the import in energy sector by at least 10% by 2022. Subsequently, MoP&NG has come up with a detailed action plan wherein Biofuels, Advanced/ alternate fuels and fuel efficiency play a major role.

• Association with AMF TCP will help MoP&NG in furthering its efforts in identification & deployment of suitable fuels for transport sector in respect of higher efficiency and lesser emissions.

• Government of India has recently notified National Policy on Biofuels-2018 which focusses on giving impetus to R&D in field of advanced biofuels such as 2G Ethanol, Bio-CNG, biomethanol, Drop-in fuels, DME etc. These advanced fuels can be produced from various kind of wastes such as crop residues, Municipal solid waste, Industrial waste, waste gases, Food waste, plastic etc.

• Though some of these advanced biofuels have successfully been deployed in few countries, India is still awaiting its deployment in transport sector. These advanced fuels
are presently in their early stages of development in our Country and necessitate extensive R&D for making these fuels a viable option for meeting our energy needs.

• Association with AMF will help MoP&NG in identifying advanced biofuels suitable for deployment in transport sector in near future. In such cases, experience of member countries in deploying advanced biofuels will be an additional benefit for MoP&NG.

Benefits
• The benefits of participation in AMF TCP are shared costs and pooled technical resources.
• The duplication of efforts is avoided and national Research and Development capabilities are strengthened.
• There is an information exchange about best practices, network of researchers and linking research with practical implementation.
• After becoming member, India will initiate R&D in other areas of its interest in advanced biofuels and other motor fuels in view of their crucial role in substituting fossil fuel imports.

9. ISPRL SIGNS MOU WITH ADNOC TO EXPLORE STORAGE OF CRUDE OIL AT PADUR

Why in news?
Indian Strategic Petroleum Reserves Ltd (ISPRL) signed a Memorandum of Understanding (MoU) in Abu Dhabi with the Abu Dhabi National Oil Company (ADNOC) to explore the possibility of storing ADNOC crude oil at ISPRL’s underground oil storage facility at Padur in Karnataka, which has a 2.5 million tonne capacity.

Highlights
• ADNOC is the only foreign oil and gas company, so far, to invest by way of crude oil in India’s strategic petroleum reserves program.
• This Memorandum of Understanding will allow ISPRL to explore, with ADNOC, opportunities related to the possible storage of ADNOC crude at Padur, which would help to significantly strengthen the country’s strategic petroleum reserves.
• This agreement reflects the strong bonds of cooperation between India and the UAE and provides a foundation for strengthening and expanding our strategic energy relationship.”
• ISPRL has already built 5.33 million tonnes of underground storage capacity at three locations - Visakhapatnam (1.33 million tonnes), Mangalore (1.5 million tonnes) and Padur (2.5 million tonnes), that can meet around 9.5 days of the country’s oil needs as per consumption data of last financial year. The government of India, in June 2018, announced the creation of two new reserves, a 4 million tonnes storage facility at Chandikhol in the eastern state of Odisha and an additional 2.5 million-tonne facility at Padur.
• The existing and newly announced strategic reserve facilities put together will provide around 21 days of emergency coverage for India’s crude oil requirements.

10. PLEA TO LIFT BAN ON GOVT. STAFF JOINING RSS ACTIVITIES

Why in news?
The Government Employees National Confederation, a body affiliated to the Bharatiya Mazdoor Sangh, demanded that Prime Minister follow the example of the Keshubhai Patel-led BJP
government in Gujarat who in 2000 lifted the ban on participation of State government employees in RSS

Highlights
- The Confederation wrote to PM on October 20 seeking an amendment to the Central Civil Services (Conduct) rules.
- "The RSS is a social service organisation, and many government employees may be interested in joining social activities,
- The ban on Central government employees from associating with the RSS was first imposed by an order on November 30, 1966.

11. GLOBAL DIGITAL CONTENT MARKET 2018

Why in news?
The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, is hosting a conference on Global Digital Content Market (GDCM) 2018, in New Delhi
Aim: to give industry stakeholders a platform to come together and discuss new avenues in the films, music, gaming and creative industry along with points of challenge that is presented due to the changing creative landscape because of the disruption brought about by digital technologies

Highlights
- India has been chosen as a host nation for the conference by World Intellectual Property Organization (WIPO) due to the strong creative industry in the country in films, music and media. The focus for this year’s conference is the Asia Pacific region.
- The GDCM 2018 will see participation of professionals from various creative fields, the digital industry around the world and delegates of the diplomatic community from Missions to the United Nations.
- It is hoped that through the GDCM 2018 an exchange of knowledge, culture and good practices amongst the nations of the Asia Pacific region will take place.
- GDCM is a platform to discuss vital issues and enhance development of the digital and IP generating industries such as publishing, films, music, and gaming all of which are major contributors to the Indian GDP. The presence of key stakeholders from India in GDCM will place it on the global digital stage.

12. YUVA SAHAKAR-COOPERATIVE ENTERPRISE SUPPORT AND INNOVATION SCHEME

Why in news?
To cater to the needs and aspirations of the youth, the National Cooperative Development Corporation (NCDC) has come up with a youth-friendly scheme ‘Yuva Sahakar-Cooperative Enterprise Support and Innovation Scheme” for attracting them to cooperative business ventures.

Highlights
- The scheme is called ‘Yuva Sahakar Cooperative Enterprise Support and Innovation Scheme’ will be implemented by the National Cooperative Development Corporation (NCDC).
- A corpus fund of Rs 1,000 crore has been created to this purpose.
- The scheme would be liberal to cooperatives in the north eastern region, those registered and operating in ‘aspirational districts’ identified by think-tank Niti Aayog as well as cooperatives which have 100 per cent women and SC/ST members.
The heavily incentivised scheme has component of subsidy as well as interest subvention and cooperative registered even one years ago will be eligible.

The project cost should not exceed Rs 3 crore and there will be two years moratorium on payment of principal amount.

It's adding that the period of moratorium may vary depending on type of project and ability to generate revenue.

NCDC lending so far has been to cooperatives working in fishery, sugar, textiles, foodgrains, crops, fruits, vegetables, cold storage, water conservation, dairy, poultry, handlooms, coir and sericulture so far. There are eight lakh registered societies in the country.

As an incentive, the Minister said the credit will be provided at two per cent less than the applicable interest rate on term loan for the project activities.

The interest rate incentive would be applicable only for timely repayers.

13. MNRE CIRCULATES DRAFT INDIAN WIND TURBINE CERTIFICATION SCHEME (IWTC)

Why in news?
Ministry of New and Renewable Energy, in consultation with National Institute of Wind Energy, Chennai, has prepared a draft of new Scheme called Indian Wind Turbine Certification Scheme (IWTC) incorporating various guidelines.

IWTC

The IWTC is a consolidation of relevant National and International Standards (IS/IEC/IEEE), Technical Regulations and requirements issued by Central Electricity Authority (CEA), guidelines issued by MNRE and other international guidelines. It has also strived to incorporate various best practices from other countries to ensure the quality of the wind energy projects.

The draft Scheme enlists the guidelines for the benefit of all the stakeholders from concept to lifetime of wind turbine, including Indian Type Approved Model (ITAM), Indian Type Certification Scheme (ITCS), Wind Farm Project Certification Scheme (WFPCS) and Wind Turbine Safety & Performance Certification Scheme (WTSPCS).

The IWTC is envisaged to assist and facilitate the following stakeholders; (i.) Original Equipment Manufacturers (OEMs) (ii.) End Users -Utilities, SNAs, Developers, IPPs, Owners, Authorities, Investors and Insurers (iii.) Certification Bodies (iv.) Testing Laboratories.

Need for such a scheme

Wind energy has matured over the decades to be the mainstream source of renewable power generation in India. The steady growth of the sector has seen different types of wind turbines with diverse performance and safety criteria.

The Ministry of New and Renewable Energy (MNRE), Government of India through various policies and schemes has facilitated the healthy and orderly growth of the wind energy sector. The guideline for the recognition of the certification schemes in India by MNRE was paramount for the success of quality wind turbines installed in India.

The successful evaluation under the recognised schemes resulted in the wind turbines being listed in the Revised List of Models and Manufacturers (RLMM). This listing has resulted in stakeholders having confidence on the quality of the wind turbines offered by various manufacturers in India.
• Wind sector in India is growing at a rapid pace with increased utilization of wind energy for the power development. The modern wind turbines have higher hub heights, larger rotor diameter, higher capacity and improved Capacity Utilization Factor (CUF) along with technological improvements.
• Under these developments, there is a need for comprehensive document which provides the complete technical requirements which shall have to be complied by the wind turbines for the safe and reliable operation by all the stakeholders viz, OEMs, Independent Power Producers (IPPs), wind farm developers, Financial Institutions, Utilities and others. Also, there is a need for technical regulations which shall facilitate common ground for OEMs, Developers, Investors and Financial Institution for systematic development.

14. SWADESH DARSHAN SCHEME

Why in news?
Two important projects under Swadesh Darshan Scheme of Ministry of Tourism, Government of India were inaugurated at PTSO Lake in Tawang, Arunachal Pradesh. These projects are “Development of North East Circuits: Bhalukpong- Bomdila - Tawang Project & Nafra- Seppa- Pappu, Pasa, Pakke Valleys- Sangdupota- New Sagalee- Ziro- Yomcha Project

Objective of Swadesh Darshan Scheme:
• Integrated development of Infrastructure in identified theme based circuits.
• Provide complete tourism experience with varied thematic circuits.
• Follow community-based development and pro-poor tourism approach.
• Creating awareness among the local communities about the importance of tourism for them in terms of increase in sources of income, improved living standards and overall development of the area.
• Promote local arts, culture, handicrafts, cuisine, etc to generate livelihoods in the identified regions.
• Harness tourism potential for its direct and multiplier effects in employment generation and economic development.

Features of Swadesh Darshan Scheme:
• 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).
• A National Steering Committee (NSC) will be constituted with Minister in charge of M/O Tourism as Chairman, to steer the mission objectives and vision of the scheme.

Swadesh Darshan Scheme
Under the scheme ‘Swadesh Darshan’, the Ministry of Tourism provides Central Financial Assistance (CFA) to State Governments/Union Territory Administrations for infrastructure development of circuits. Under the Swadesh Darshan scheme, 13 thematic circuits have been identified, for development namely: North-East India Circuit, Buddhist Circuit, Himalayan Circuit, Coastal Circuit, Krishna Circuit, Desert Circuit, Tribal Circuit, Eco Circuit, Wildlife Circuit, Rural Circuit, Spiritual Circuit, Ramayana Circuit and Heritage Circuit.
• A Mission Directorate headed by the Member Secretary, NSC as a nodal officer will help in identification of projects in consultation with the States/ UTs governments and other stake holders.
• PMC will be a national level consultant to be appointed by the Mission Directorate.

15. SC pulls up States for not recruiting judges

Why in news?
The Supreme Court pulled up various State governments and the administrative side of the High Courts for delay in filling vacancies in subordinate judicial services.

Highlights
• A Bench, led by Chief Justice of India Ranjan Gogoi, had taken suo motu cognisance of more than 5,000 vacancies for subordinate judicial posts even as pendency touched crores.
• More than three crore cases are pending in the lower courts.
• It found that the source of the problem lay in poor infrastructure, from courtrooms to residences for judges, and a sheer lackadaisical approach to conducting the appointment process on time.
• The Supreme Court had earlier warned of centralising appointments to the subordinate judiciary. The court found there were more than 1,000 vacancies in Uttar Pradesh alone.
• The court took note of an undertaking given by the Uttar Pradesh government that it would provide adequate housing arrangements for judicial officers.
• The Bench found that the recruitment process was under way for only 100 vacancies in Delhi, which has over 200 vacancies.
• In a five-page order earlier, the Supreme Court had recorded that there were a total of 22,036 posts in the district and subordinate judiciary, ranging from district judges to junior civil judges, across the States.
• It said 5,133 out of the 22,036 posts were vacant.

16. RAMAYANA EXPRESS

Why in news?
The Shri Ramayana Express, a special tourist train to run on the Ramayana circuit to cover major spots related to the Hindu epic was flagged off from Safdarjung Railway Station in New Delhi.

Highlights
• The train will complete its journey till Rameswaram, Tamil Nadu, in 16 days covering all important destinations associated with the life of Lord Shri Ram.
• The train will then cover the important destinations of Ramayana circuit such as Nandigram, Sitamarhi, Janakpur, Varanasi, Prayag, Shringverpur, Chitrakoot, Nasik, Hampi and Rameshwaram.
• Named as Shri Ramayana Yatra-Sri Lanka, the pilgrimage circuit will have two travel components one each in India and Sri Lanka.

17. WEST BENGAL GETS A NEW LOKAYUKTA

Why in news?
Retired Calcutta High Court judge Ashim Kumar Roy was appointed the new Lokayukta of West Bengal.
Highlights

• The decision was taken at a meeting in the State Assembly where Speaker, Chief and Leader of the Opposition were present.
• Justice Roy, who will occupy the post for three years, will be the second Lokayukta of the State after Samaresh Banerjee, who had served in the post between 2006 and 2009.
• There has been no Lokayukta in the State since 2009.
• Earlier in 2018, the West Bengal Assembly had passed the Lokayukta (Amendment) Bill, 2018, keeping the Chief Minister out of its purview in matters relating to public order.
• The legislation, however, allows the Lokayukta to investigate matters relating to the CM on the remaining 58 subjects under the State List with the approval of two-third of the members of the Assembly present and voting; there are 59 subjects in the State List.
• The TMC government had then said recruitment of police, deployment of forces and any other emergency situations would be regarded as public order.

Lokayukta

• The Lokayukta (also Lok Ayukta) is an anti-corruption ombudsman organization in the Indian states. Once appointed, Lokayukta can not be dismissed nor transferred by the government, and can only be removed by passing an impeachment motion by the state assembly.
• The Administrative Reforms Commission (ARC) headed by Morarji Desai submitted a special interim report on "Problems of Redressal of Citizen's Grievances" in 1966. In this report, the ARC recommended the setting up of two special authorities designated as 'Lokpal' and 'Lokayukta' for the redressal of citizens' grievances.
• The origin of the Lokayukta can be traced to the Ombudsmen in Scandinavian countries. The Administrative Reforms Commission, (1966-70), had recommended the creation of the Lokpal at the Centre and Lokayukta in the states. The Centre is yet to get a Lokpal.
• The Lokayukta is created as a statutory authority with a fixed tenure to enable it to discharge its functions independently and impartially. The person appointed is usually a former High Court Chief Justice or former Supreme Court judge.
• Members of the public can directly approach the Lokayukta with complaints of corruption, nepotism or any other form of mal-administration against any government official.
• The range of powers vary. In, say, Delhi, the Lokayukta inquires into allegations of corruption, misuse of authority and wrong doings of public functionaries including Chief Minister, Ministers and MLAs. And civil servants/bureaucrats, judiciary, police and the Delhi Development Authority are excluded from its ambit.
• In Karnataka, which in the 1980s was the first state to move to get a Lokayukta and where there has been much controversy over the teeth that the office has, the new powers promised to the Lokayukta keep the Chief Minister, ministers, MPS and MLAs out of the purview.

18. J AND K ALL SET FOR PRESIDENTS RULE

Why in news?
The State of J & K was all set for President’s rule in January as there were no plans to dissolve the Assembly yet.
Separate Constitution:

- Since J&K has a separate Constitution, Governor’s rule is imposed under Section 92 for six months after an approval by the President.
- In case the Assembly is not dissolved within six months, President’s rule under Article 356 is extended to the State. Governor’s rule expires in the State on January 19.
- Governor’s rule in J&K
- The imposition of governor’s rule in J&K is slightly different than that in other states. In other states, the president’s rule is imposed under the Article 356 of Constitution of India.
- In J&K, governor’s rule is mentioned under Article 370 section 92 – ‘Provisions in case of failure of constitutional machinery in the State.’

Article 370 section 92:

- If at any time, the Governor is satisfied that a situation has arisen in which the Government of the State cannot be carried on in accordance with the provisions of this Constitution, the Governor may by Proclamation:
  - Assume to himself all or any of the functions of the Government of the State and all or any of the powers vested in or exercisable by anybody or authority in the State.
  - Make such incidental and consequential provisions as appear to the Governor to be necessary or desirable for giving effect to the objects of the Proclamation, including provisions for suspending in whole or in part the operation of any provision of this Constitution relating to anybody or authority in the State.

Key Facts:

- Any such Proclamation may be revoked or varied by a subsequent Proclamation. Any such Proclamation whether varied under subsection (2) or not, shall except where it is a Proclamation revoking a previous Proclamation, cease to operate on the expiration of six months from the date on which it was first issued.
- If the Government or by a Proclamation under his section assumes, to himself any, of the powers of the Legislature to make his laws, any law made by him in the exercise of that power shall, subject to, the terms there of continue to have effect until two years have elapsed from the date on which the proclamation ceases to have effect, unless sooner.
- No Proclamation under this section shall, except where it is a Proclamation revoking a previous Proclamation, be laid before each House of the Legislature as soon as it is convened.
- President’s Rule in the Indian context
- The imposition of Article 356 of the Constitution on a State following the failure of constitutional machinery is called President’s Rule in India. Once the President’s Rule has been imposed on a state, the elected state government will be temporarily dissolved, and the Governor, who is appointed by the government at the Centre, will replace the Chief Minister as the chief executive of the State.
- The state will fall under the direct control of the Union government, and the Governor will continue to be head the proceedings, representing the President of India – who is the Head of the State.
- The imposition of the President’s rule requires the sanction of both the houses of Parliament. If approved, it can go on for a period of six months. However, the imposition cannot be extended for more than three years, and needs to be brought before the two houses every six months for approval.
19. **SC TO DIRECT STATES TO IMPLEMENT DRAFT WITNESS PROTECTION SCHEME**

**Why in news?**
The Supreme Court of India said that it would direct all the states to implement the draft witness protection scheme framed by the Centre in consultation with the National Legal Services Authority (NALSA).

**Highlights**
- The issue of the witness protection scheme had cropped up earlier when the top court was hearing a public interest litigation (PIL) seeking protection for witnesses in rape cases involving self-styled preacher Asaram Bapu.
- During the hearing on November 19, advocate Gaurav Agrawal, assisting the court as an amicus curiae in the matter, told the bench that the government has finalised the draft witness protection scheme in consultation with NALSA, based on the inputs received from a majority of the states.
- The advocate stated that the scheme has three categories of witnesses based on the threat perception, and suggested that the states should start enforcing it.
- The petitioners, who are witnesses in cases related to Asaram, had sought a probe into the instances of alleged attacks and disappearances of witnesses in these cases.
- The top court had in March 2017 questioned Haryana and Uttar Pradesh over the status of implementation of witness protection schemes till then and had directed them to provide security cover to witnesses in rape cases against Asaram, who is currently in jail.
- While Uttar Pradesh has three such witnesses, Haryana has one.

**Objectives Witness Protection Scheme-2018**
- To enable a witness to give testimony in a judicial setting or to cooperate with law enforcement and investigations without fear of intimidation or reprisal.
- To ensure that the investigation, prosecution and trial of criminal offences is not prejudiced because witnesses are intimidated or frightened to give evidence without protection from violent or other criminal recrimination.
- To promote law enforcement by facilitating the protection of persons who are involved directly or indirectly in providing assistance to criminal law enforcement agencies and the overall administration of Justice.
- To give witnesses the confidence to come forward to assist law enforcement and Judicial Authorities with full assurance of safety.
- To identify a series of measures that may be adopted to safeguard witnesses and their family members from intimidation and threats against their lives, reputation and property.

**Why is there a need for such a scheme?**
- In cases involving influential people, witnesses turn hostile because of the threat to life and property. In such cases, witnesses find that there is no legal obligation by the state for extending any security.
- The Supreme Court had held in an old judgement that it is the salutary duty of every witness who has the knowledge of the commission of the crime, to assist the State in giving evidence.
- If the witnesses get threatened or are forced to give false evidence, it would not result in a fair trial.
- Due to witnesses turning hostile, the conviction rate in murder and rape in India is just around 10 to 12 per cent.
• The first-ever reference to witness protection in India came in 14th Law Commission Report in 1958.

Why now?

• Organised crime has seen a huge jump in recent years and is becoming stronger and more diverse.
• In the investigation and prosecution of crime, particularly the more serious and complex forms of organised crime, it is essential that witnesses, the cornerstones for successful investigation and prosecution, have trust in the criminal justice system.
• Witnesses need to have the confidence to come forward to assist law enforcement and prosecutorial authorities. They need to be assured that they will receive support and protection from intimidation and the harm that criminal groups may seek to inflict upon them in attempts to discourage or punish them from co-operating.
• Hence, legislative measures to emphasise prohibition against tampering of witnesses have become the imminent and inevitable need of the day.
• Even the Law Commission of India has recommended that witnesses should be protected from the wrath of the accused in any eventuality.

some of the rights that the witnesses should be entitled to:
• Right to give evidence anonymously
• Right to protection from intimidation and harm
• Right to be treated with dignity and compassion and respect of privacy
• Right to information of the status of the investigation and prosecution of the crime
• Right to secure waiting place while at Court proceedings
• Right to transportation and lodging arrangements

Scope of the Scheme
• The Witness Protection scheme may be as simple as providing a police escort to the Courtroom, offering temporary residence in a safe house or using modern communication technology such as video conferencing for the recording of testimony.
• In other more complex cases, where cooperation by a witness is critical to the successful prosecution of a powerful criminal group, extraordinary measures are required to ensure the witness’s safety such as anonymity, relocation of the witness under a new identity in a new, undisclosed place of residence.
• The witness protection, especially in its practical operation, must, therefore, be viewed on a case by case basis in meaningful assistance to the witnesses.

Background
• In November 2017, the Supreme Court had asked the Centre as to why a draft scheme cannot be formulated for witness protection in the country when specific provisions in this regard were already there in the National Investigation Agency (NIA) Act.
• It had said that the Ministry of Home Affairs (MHA) could at least come out with a draft scheme for witness protection and had asked the Attorney General to give his suggestions on the issue.
• The court had said that the witness protection scheme can be implemented for at least sensitive cases and that the MHA could come out with a comprehensive plan.
• In April 2018, the Centre had informed the top court that it had framed a draft witness protection scheme and it was circulated among the states and Union Territories administration for comments.
• The court had asked the Centre to finalise the scheme after getting a response from the states and Union Territories.
20. UNION HRD MINISTRY LAUNCHES INSTITUTION’S INNOVATION COUNCIL (IIC)

Why in news?
Union HRD Ministry has launched the ‘Institution’s Innovation Council (IIC) program under Innovation cell of MHRD in New Delhi.

Aim: To foster the culture of Innovation in all Higher Education Institutions (HEIs) across the country.

Highlights
- It is a significant step in institutionalizing innovation and developing a scientific temperament in the country.
- More than 1000 Higher Education Institutions (HEIs) have already formed IICs in their campuses and enrolled for the IIC network managed by MHRD’s Innovation cell.
- Indian universities are setting up research centers through ‘Institution’s Innovation Council (IIC) program to improve global innovation ranking in next 2-3 years through this initiative.

21. CABINET APPROVES EXTENSION OF COMMISSION’S TERM TO EXAMINE ISSUE OF SUB-CATEGORISATION OF OBCS

Why in news?
The Union Cabinet has approved the extension of the term of the Commission to examine the issue of Sub-categorization of Other Backward Classes in the Central List for six months beyond November 30, 2018 and till May 31, 2019.

Highlights
- The Commission has held extensive meetings with the stake holders including the state governments, the state backward classes commissions, various community associations and general public belonging to various backward classes and commissions and obtained caste-wise records of OBCs admitted in higher educational institution as well as similar caste-wise data of recruits in central departments, central public sector undertakings, public sector banks and financial institutions.
- Based on the emanating information from the data as processed and analysed, the Commission has expressed that a round of discussion with the states and their backward classes commission was required before finalising the sub-categorised lists and the report.

Background
- Union Government with approval of President had constituted five member Commission under article 340 of Constitution in October, 2017. It is headed by former Chief Justice of Delhi High Court Justice (Retd) G. Rohini. Its report is expected to recommend earmarking sub-quotas for the extremely backward classes within the OBCs.
- The commission has been formed under Article 340 of the Constitution which was also used to establish landmark Mandal Commission (set up in 1979) more than two decades ago which recommended 27% reservation for socially and educationally backward classes in higher education and government jobs. Over the years, benefits of this reservation were mostly cornered mostly by dominant OBC groups.
- Even National Commission for Backward Classes (NCBC) had in 2015 had noted that unequals cannot be treated equally and recommended that OBCs be categorised into extremely backward classes, more backward classes and backward classes. At present,
11 states have sub-categorised OBCs for their state state services. Centre based on devise a similar methodology for the central OBC list.

**Mandate of Sub-categorisation commission**
- It is tasked to examine extent of inequitable distribution of benefits of reservation among castes included in broad category of OBC in central government jobs and educational institutions especially with reference to OBCs included in Central list.
- It is also tasked to take up exercise of identifying respective castes, sub-castes, communities synonyms in Central List of OBCs and classify them into their respective sub-categories. It is mandated was to work out mechanism, norms, criteria and parameters, in scientific approach, for sub-categorization within such OBCs

22. QUADRICYCLES

**Why in news?**
Quadricycles can now be bought for personal usage, with the Ministry of Road Transport and Highways notifying insertion of the item ‘Quadricycle’ as a ‘non-transport’ vehicle under the Motor Vehicles Act 1988.

**What is Quadricycle?**
- A quadricycle is a vehicle of the size of a three-wheeler but with four-tyres and is fully covered like a car.
- It has an engine like that of a three-wheeler.
- This makes it a cheap and safe mode of transport for last-mile connectivity.
- **Background**
- Though the government permitted the use of quadricycles for commercial purpose in June, the latest notification opens the door for their use for personal purpose.
- Bajaj Auto is the only company that makes the vehicle named ‘Qute’, which it exports to countries like Turkey.
- Quadricycles may signal the beginning of a new era in public transportation as currently three-wheelers remain a highly unsafe mode for commuting.
- **Conflicting stand on Road Safety**
- The introduction of such category also raises a lot of questions about the government’s thought process.
- On the one hand, it is talking about road safety and the need for environment-friendly vehicles and therefore stressing on features such as ABS and airbags.
- On the other, it is promoting vehicles like quadricycles which do not have such safety mechanisms.
- There is a strong possibility that the shift to quadricycles may happen if the vehicles get preferential tax treatment or if the rules are relaxed, particularly for the electric/hybrid variants.

23. CONSTITUTION DAY

**Why in news?**
November 26 is called as constitution day

**What is Constitution day?**
- Constitution day which is also known as the Samvidhan Divas is celebrated every year on November 26 to mark the day on which the Constitution of India was adopted. While
the adoption of the Constitution took place on November 26, 1949, it came into effect on January 26, 1950.

- On November 26, 1949, the Constituent assembly had met and with loud and prolonged cheers and thumping of desks greeted the passing of the Constitution.
- Dr. Rajendra Prasad, President of the Constituent Assembly, in his speech before putting the motion to pass the Constitution, paid tributes to Mahatma Gandhi and said that I shall only hope that all those whose good fortune it may be to work this Constitution in future, will remember that it was a unique victory which we achieved by unique method taught by the Father of the Nation, and it is up to us to preserve and protect the Independence that we have won and to make it really bear fruit for the man in the street.”
- After the Constitution was passed, the historic session of the Constituent Assembly ended with the singing of the National Anthem "Jana-gana-mana adhinayaka Jai Hey, Bharat Bhagya Vidhata," by Purnima Banerjee, a veteran freedom fighter and sister of the late freedom fighter, Aruna Asaf Ali.
- It was on November 19, 2015, when the government of India with the help of a gazette notification declared November 26 as the Constitution Day. There is no public holiday on this day.
- The draft of the constitution was prepared by the drafting committee under BR Ambedkar’s aegis. According to the government notification, the Constitution Day was also a tribute to Ambedkar.
- Earlier, this day was commemorated as National Law Day, after a resolution by the Supreme Court Bar Association, a lawyers’ body, in 1979.
- Celebrations this year:
  - With the collective efforts of the Buddhist Association for the blind and the Saavi Foundation and Swagat Thorat, for the first time the constitution will be made available in Braille. As part of the joint project, the constitution will be made available in five parts in Braille for the benefit of visually challenged individuals.

24. ARTICLE 370

Why in news?
The Supreme Court has refused to entertain a fresh petition on Article 370, which gives special autonomous status to Jammu and Kashmir, and said that the issues raised in it were already part of the pending pleas.

Highlights

- The petition sought a declaration that Article 370 of the Constitution had lapsed with the dissolution of constituent assembly of Jammu and Kashmir on January 26, 1957 and it cannot be treated as mandatory for exercise of powers of the President.
- The plea has also sought that the Constitution of Jammu and Kashmir be declared as “arbitrary, unconstitutional and void”, claiming that it was against the supremacy of the Indian Constitution and contrary to the dictum of “One Nation, One Constitution, One National Anthem and One National Flag”.
- It has sought declaring as arbitrary some provisions of the Jammu and Kashmir Constitution, which deals with permanent residency and flag of the valley among other issues, for being violative of the Preamble and the Indian Constitution.
- The petition has said that continuance of two parallel constitutions, one for the Centre and other for the state of Jammu and Kashmir, “reeks of a weird dichotomy” as most of the provisions of the Indian Constitution has already been extended to the state.
• It has alleged that due to vote bank politics, successive governments did nothing to repeal Article 370 and Constitution of Jammu and Kashmir was adopted much after the Indian Constitution came into force. It also added that the instrument of accession of October 26, 1947 does not talk about separate Constitution or constituent assembly for the state.

**Important provisions under the article:**
- According to this article, except for defence, foreign affairs, finance and communications, Parliament needs the state government’s concurrence for applying all other laws. Thus the state’s residents live under a separate set of laws, including those related to citizenship, ownership of property, and fundamental rights, as compared to other Indians.
- Indian citizens from other states cannot purchase land or property in Jammu & Kashmir.
- Under Article 370, the Centre has no power to declare financial emergency under Article 360 in the state. It can declare emergency in the state only in case of war or external aggression. The Union government can therefore not declare emergency on grounds of internal disturbance or imminent danger unless it is made at the request or with the concurrence of the state government.
- Under Article 370, the Indian Parliament cannot increase or reduce the borders of the state.
- The Jurisdiction of the Parliament of India in relation to Jammu and Kashmir is confined to the matters enumerated in the Union List, and also the concurrent list. There is no State list for the State of Jammu and Kashmir.
- At the same time, while in relation to the other States, the residuary power of legislation belongs to Parliament, in the case of Jammu and Kashmir, the residuary powers belong to the Legislature of the State, except certain matters to which Parliament has exclusive powers such as preventing the activities relating to cession or secession, or disrupting the sovereignty or integrity of India.
- The power to make laws related to preventive detention in Jammu and Kashmir belong to the Legislature of J & K and not the Indian Parliament. Thus, no preventive detention law made in India extends to Jammu & Kashmir.
- Part IV (Directive Principles of the State Policy) and Part IVA (Fundamental Duties) of the Constitution are not applicable to J&K.

**What is Article 370?**
- Article 370 of the Indian Constitution is a ‘temporary provision’ which grants special autonomous status to Jammu & Kashmir.
- Under Part XXI of the Constitution of India, which deals with “Temporary, Transitional and Special provisions”, the state of Jammu & Kashmir has been accorded special status under Article 370.
- All the provisions of the Constitution which are applicable to other states are not applicable to J&K.

---

### 25. EMERGENCY RESPONSE SUPPORT SYSTEM (ERSS)

**Why in news?**
The Union Home Minister launched Emergency Response Support System (ERSS) for Himachal Pradesh.

**Highlights**
- Himachal Pradesh is the first state to launch pan-India single emergency number ‘112’ under ERSS.
• It will connect to Police, Fire, Health and other helplines through an Emergency Response Centre in the State.
• A “SHOUT” Feature:
• To ensure safety of women, a SHOUT feature has been introduced in 112 India mobile app to seek immediate assistance from registered volunteers in the vicinity apart from the immediate assistance from Emergency Response Centre.
• This feature is exclusively available for women.
• Central Government
• has allocated Rs 321.69 crore under Nirbhaya Fund for implementation of ERSS project across the country.

Nirbhaya Fund
➢ In order to eradicate violence against women and girls, Central Government has set up Nirbhaya Fund.
➢ It is administered by the Department of Economic Affairs, Ministry of Finance.
➢ It can be utilized for projects for women safety and security.
➢ Ministry of Women and Child Development is the nodal authority for appraising/recommending the proposals/schemes to be funded under Nirbhaya fund.
1. UNITED NATIONS WORLD TOURISM ORGANIZATION (UNWTO)

Why in news?
109th session of United Nations World Tourism Organization (UNWTO) Executive Council is being held in Manama, Bahrain. The Executive Council will discuss several topics on the agenda that are related to the development of global Tourism sector.

Highlights
- Tourism Minister K J Alphons was the leader of Indian delegation at the 109th session.
- During the opening day of the Executive Council meeting, Alphons chaired the ‘Programme and Budget Committee’ meeting of UNWTO.
- In his opening remarks, the Minister highlighted the role of tourism in socio-economic development through job creation, enterprise and environment development and foreign exchange earnings.
- As the chair of the Committee, the Minister informed the session that for the first time, UNWTO had a surplus budget and most of the arrears due have been paid.
- India will be the chair of Programme and Budget Committee of Executive Council till 2021.

UNWTO
- The World Tourism Organization (UNWTO) is the United Nations agency responsible for the promotion of responsible, sustainable and universally accessible tourism.
- UNWTO’s membership includes 158 countries, 6 territories and over 500 affiliate members representing the private sector, educational institutions, tourism associations and local tourism authorities. Its headquarters are located in Madrid.
- The UNWTO plays a catalytic role in promoting technology transfers and international cooperation, in stimulating and developing public-private sector partnerships and in encouraging the implementation of the Global Code of Ethics for Tourism.
- The UNWTO Executive Council represents the Organization’s governing body whose task is to take all necessary measures in consultation with the secretary-general, for implementation of its own decisions and recommendations of the assembly and report thereupon to the assembly.
- The council consists of 35 full members elected by the assembly in proportion of one member for every five full members, in accordance with the rules of procedure laid down by the assembly with a view to achieving fair and equitable geographical distribution.

2. INTERNATIONAL SOLAR ALLIANCE (ISA)

Why in news?
The Union Cabinet has given ex-post facto approval for opening up International Solar Alliance (ISA) membership to all countries that are members of the United Nations. In this regard, Cabinet has approved to move Resolution in first Assembly of ISA for amending the Framework Agreement of ISA.
International Solar Alliance (ISA)

- International Solar Alliance (ISA) is an initiative proposed by our Prime Minister Narendra Modi and was launched by him at the UN Climate Change Conference in Paris along with the President of France.
- The interim secretariat of ISA is located at Gwalpahari in Gurugram, India and its headquarters is also proposed to be built on the campus of National Institute of Solar Energy (NISE), Gurugram.
- It is an alliance of the “sunshine countries” i.e., the countries lying in between the two tropics- Tropic of Cancer and Tropic of Capricorn with an objective of efficient utilization of the solar energy. The alliance was formed with the intent to reduce the dependence on the non-renewable sources of energy like fossil fuels.
- International Solar alliance is based on a treaty and is an inter-governmental organization.
- The countries that do not fall within the Tropics are also allowed to join the alliance but do not enjoy the voting rights.
- The main objective of ISA is to include global deployment of over 1,000GW of solar generation capacity and mobilisation of investment of over US$ 1000 billion into solar energy by 2030.
- ISA also aims to serve as an action-oriented organization by bringing together countries with rich solar potential to aggregate global demand, thereby reducing prices through bulk purchase.
- The interim secretariat of ISA is located at Gwalpahari in Gurugram, India and its headquarters is also proposed to be built on the campus of National Institute of Solar Energy (NISE), Gurugram.
- India has announced its ambitious targets of generating 175 Giga Watts of renewable energy by the year 2022 as a part of its commitment to reduce global warming and resist climate change, out of which 100 Giga Watts is expected to be from Solar Energy.
- A large part of energy capacity to meet its targets would come from large scale renewable energy plants connected to national electricity grid and installation of rooftop solar energy.

3. MOU AMONGST BRICS NATIONS

Why in news?
The Union Cabinet has given its ex-post facto approval for the MoU among BRICS nations regarding Cooperation in the Social and Labour Sphere. The MoU was signed during BRICS Labour and Employment Ministers (LEM) Meeting.

Highlights
- The parties including India have agreed to cooperate and hold mutual events in the prominent areas viz. labour legislation and enforcement, protection of workers’ rights with focus on vulnerable groups.
- It would focus on Employment and labour market policies, Professional education, skills and training and social protection.
- The MoU is not an International Treaty and does not create rights and obligations for the parties governed by international law.
- The MoU provides a mechanism for cooperation, collaboration and maximum synergy amongst BRICS member countries with the common objective of inclusive growth and shared prosperity in the newindustrial revolution.
- This would facilitate member countries to share knowledge and also implement joint programmes on matter of Labour and Employment, Social Security and Social dialogue.

**BRICS Labour and Employment Ministers (LEM) Meeting**
- The BRICS Labour and Employment Ministerial meeting took place at Durban, South Africa.
- The Draft MoU between BRICS countries regarding cooperation in the social and labour sphere was discussed deliberated and finalized and was signed by respective labour Ministers of BRICS member countries.
- The provisions of the MoU clearly indicate its objectives as cooperation in the nature of successful sharing of policy measures; exchange programmes; consultations; expert meetings and conference etc. in the social and labour sphere.

4. **DHARMA GUARDIAN**

**Why in news?**
The Indian Army and Japanese Army completed their joint military exercise, ‘DHARMA GUARDIAN’ – 2018 at Counter Insurgency and Jungle Warfare School, Vairengte, Mizoram, India. It is a significant step towards fostering military and diplomatic ties between the two countries.

**Highlights**
- The primary focus of the exercise is to train and equip the contingents to undertake joint counter insurgency and counter terrorist operations in urban and semi urban terrain.
- The participants were initially familiarised with each other’s organisational structure, tactical drills and planning process before graduating to joint tactical exercises.
- The contingents honed their tactical and technical skills in a wide spectrum of counter insurgency operations in including joint training on weapons and equipment, field training exercise and handling of improved explosive devices.
- Commanders at various levels from both sides were exercised to work in close coordination to receive and collate information jointly, plan operations and issue suitable orders to respective integrated groups.
- The exercise provided an ideal platform for both contingents to share their operational experience and expertise while also being instrumental in broadening the interoperability and cooperation between armies of India and Japan.
- Observers of both the nations appreciated the professionally conducted training which resulted in instilling confidence in each other’s capability.

5. **TURGA HYDEL PROJECT**

**Why in news?**
India and Japan signed Loan Agreement worth Rs. 1817 crore for construction of Turga Pumped Storage Hydel Project. On completion, this project will contribute to Industrial Development and Living Standard Improvement in the West Bengal.
Highlights
- The Turga Pumped Storage Project envisages utilization of rainfall in the catchment of the Turga Nala in Ayodhya hills for peak power generation for a Pumped Storage type project development.
- The project envisages construction of Upper Dam across Turga Nala, a tributary of Subarnarekha river and a water conductor system with an underground Power House on the downstream of Upper Dam and a Lower Dam having intermediate catchment of 4.37 sq. km.
- The Project comprises of four Reversible Pump-Turbine units each of 250 MW Capacity installed in underground Power House. Two of these units will be variable speed machines and the other two will be fixed speed machines.
- The objective of the Project is to strengthen the capability to respond to fluctuation in supply and demand of power and to improve stability of the power supply by constructing the pumped storage facilities, thereby contributing to the Industrial Development and Living Standard Improvement in the State of West Bengal.

6. SWIFT

Why in news?
The Belgium-based Society for Worldwide Interbank Financial Communications (SWIFT) financial messaging service announced that it was suspending access for some Iranian banks “in the interest of the stability and integrity of the wider global financial system.

Background
The move came after the United States reimposed oil and financial sanctions against Iran, significantly turning up the pressure on Tehran in order to curb its alleged missile and nuclear programmes.

SWIFT (Society for World Interbank Financial Telecommunication System) platform
- SWIFT is global financial messaging service that enables financial institutions worldwide to send and receive information about financial transactions in secure, standardized and reliable environment. It is used to transmit messages relating to cross border financial transactions.
- It was founded in 1973 and is headquartered in La Hulpe, Belgium. It is a cooperative society under Belgian law owned by its member financial institutions with offices around the world. Globally over 11,000 financial institutions in more than 200 countries use services of SWIFT.
- SWIFT does not facilitate funds transfer, rather, it sends payment orders, that must be settled by correspondent accounts that institutions have with each other. On receiving this message through SWIFT, banks abroad, mostly branches of domestic banks abroad provide funds to the company.

What is it not?
It's not a bank, it doesn't hold money or manage it. It neither initiate transfers nor clears or settles payments.

Why is SWIFT important?
Think of SWIFT as the central nervous system of international financial transactions. The messaging platform enables financial institutions to send, receive and track information about financial transactions in a secure and standardised way that facilitates the smooth flow of funds across borders.
What happens to a country when its banks get cut off from SWIFT?
It can be crippled financially because money transfer information can't be forwarded to its banks. When a country's banks are cut off from SWIFT, it can't pay for imports and can't receive payment for exports.

7. 18TH INDIAN OCEAN RIM ASSOCIATION COUNCIL OF MINISTERS MEETING

Why in news?
The 18th Indian Ocean Rim Association (IORA) Council of Ministers Meeting was held in Durban, South Africa. Minister of State for External Affairs, attended the IORA Council of Ministers Meeting.

Highlights
- This meeting is taking place during the on-going celebrations of the 150th year of the birth anniversary of Mahatma Gandhi and the 100th birth anniversary of Nelson Mandela.
- The minister commended the collective commitment towards the formation of Working Groups on maritime safety and security, Blue Economy and Women Economic Empowerment that has been achieved in the last one year and committed to not only sustain but also build on this momentum.
- He informed the meeting of the several initiatives that India has launched and that India has completed twelve of the 13 announced initiatives, concluding with the recent 2nd IORA Renewable Energy Ministerial Meeting.
- He also mentioned the flagship project of the establishment of an "IORA Centre of Excellence- the Digital Knowledge Hub". This Centre is envisaged to serve as a data center and a resource of expertise, knowledge, data and analysis. This Digital Knowledge Hub is being developed to collectively pool the knowledge, resources, expertise by and for the Member States.

8. INDIA RE-ELECTED AS MEMBER OF ITU COUNCIL TILL 2022

Why in news?
India has been elected as a member of the International Telecommunications Union Council (ITU) for another 4-year term - from 2019 to 2022. The elections to the council were held during the ongoing ITU Plenipotentiary Conference 2018 at Dubai, UAE.

Highlights
- India secured 165 votes and ranked third among the 13
countries elected to the council from the Asia-Australasia region, and eighth among the 48 countries elected to the council globally.

- The presence of India in the council of global body will help the country have its say at a time when global standards for technology will be freezed and currently work is going on around 5G standards.
- India has been an active member of the ITU since 1869, earnestly supporting the development and propagation of telecom in the global community of nations.
- The ITU has 193 member states who elect representatives to the council.
- The country has been a regular member of the ITU Council since 1952, and has played an important role in harmonising the contributions of member states from the region, always respecting the principles of equality and consensus-building.

9. WORLD BANK INKS $172 MILLION PROJECT AGREEMENT WITH AP

**Why in news?**
The Central and Andhra Pradesh governments and the World Bank have signed the loan agreement for a $172.20 million project.

**Key points**
- The $172.20 million loan from the International Bank for Reconstruction and Development (IBRD), has a 6-year grace period, and a maturity of 24 years.
- This project will help to enhance agricultural productivity, profitability, and climate resilience of poor and marginalised farmers in Andhra Pradesh.
- This will benefit the Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project implemented in rural areas largely dependent upon rain-fed agriculture.
- By adopting climate-resilient seed varieties which have short maturity, are drought and heat resistant, and salt tolerant, the project will help reduce risks of climate-related crop failure and help enhance farmer’s income.

**Help to reduce GHS**
- India’s per capita emission of Green House Gases (GHG) is also on the rise, though current per capita levels of 2.44 tCO2 equivalent in 2012.
- The agriculture sector is the second largest contributor with around 18 percent of the country’s total GHG emissions.
- Enhanced soil-water conservation and climate-resilient farm management have the potential to help India reduce its GHG emissions significantly.

**World Bank Group**

World Bank Group is not just World Bank but comprises of 5 institutions managed by their member countries

1. International Bank for Reconstruction and Development (IBRD)
2. International Development Association (IDA)
3. International Finance Corporation (IFC)
4. Multilateral Investment Guarantee Agency (MIGA)
5. International Centre for the Settlement of Investment Disputes (ICSID)
10. ASEAN MEMBER COUNTRIES OF RCEP OFFER INDIA CONCESSION

Why in news?
Several Asian member countries of the proposed Regional Comprehensive Economic Partnership (RCEP) have offered India a significant concession on the extent to which it needs to open up its markets, in a bid to encourage it to join the partnership quickly.

India’s issues:
- With little progress on services negotiations and mounting pressure from the domestic industry, India was reluctant for early conclusion of negotiations given the upcoming general elections early next year.
- The key contention for India in RCEP has been the presence of China with which it has a massive $60 billion trade deficit and Indian industry apprehends greater market access to China could harm key manufacturing sectors like steel and textiles.
- India is also worried about giving greater market access to other non-FTA partners like Australia and New Zealand.

Key points
- The ASEAN countries are keen to have India as part of the partnership and have made India a concessional offer of opening up only about 83% of its market, as compared to the original 92% that the RCEP agreement stipulated.
- Apart from India, Indonesia and Australia are also due to go to elections in 2019, and while this adds to the urgency of concluding the RCEP negotiations, it makes it harder for governments to give any concessions on tariffs and subsidies closer to polls, given political compulsions, diplomats said.

RCEP
- The RCEP is a proposed trade agreement between the 10 Association of Southeast Asian Nations (ASEAN) countries and their six free trade agreement partners, namely Australia, China, India, Japan, Korea, and New Zealand.
- The grouping would comprise 25% of global GDP, 30% of global trade, 26% of FDI flows, and 45% of the population.

11. NOT IN DIRECT TALKS WITH TALIBAN: MEA

Why in news?
Amid reports of a significant shift in stance with India attending talks with the Taliban at the second 12-nation ‘Moscow format meeting of consultations on Afghanistan’ in Moscow, the Ministry of External Affairs has clarified that no direct conversation between the two sides was part of the agenda.
Background
- Russia in August proposed holding multilateral peace talks in Moscow and invited delegations from India, Pakistan, the U.S., China, Iran and five Central Asian Republics and the Taliban to attend a summit.
- India will be sending two former senior diplomats to attend these talks on the Afghanistan peace process in Russia.
- It will mark the first time an Indian delegation has been present at the table in talks with the Taliban representatives.
- The talks has come at a time when the Afghan government is struggling to recover control of districts lost to Taliban insurgents while casualties among security forces have reached record levels.
- The talks, known as the “Moscow format” will include a “high-level” delegation from the Taliban as well as a delegation of Afghanistan “High Peace Council”, along with twelve countries.

Shift in India’s stand vis-a-vis Taliban:
- India had refused to recognise the Taliban government in Afghanistan (1996-2001) and had opposed talks with the Taliban at least until a few years ago, insisting thus far on an “Afghan-owned, Afghan-led and controlled” process.
- It would mark the first time an Indian delegation would be at the table with a Taliban delegation from its political office in Doha since the IC-814 hijack in 1999.
- According to government officials said that the decision was the outcome of “close discussions with the Afghanistan government,” and it was felt necessary for India to have a “presence” there

12. U.S. EXEMPTS CHABAHAR PORT WORK FROM SANCTIONS

Why in news?
The Chabahar port in Iran will be exempt from U.S. sanctions which following the 180-day cool-off period after the U.S. withdrew from the Joint Comprehensive Plan of Action (Iran Deal).

Key points
- It also granted a waiver for the construction of a railway line from the Iranian port city to the Afghan border and Afghanistan’s continued imports of Iranian petroleum products.
- All these sanctions were made under the Iran Freedom and Counter-Proliferation Act of 2012 (IFCA).

Background:
Secretary of state Mike Pompeo said that eight countries – India, China, Italy, Greece, Japan, South Korea, Taiwan and Turkey – were temporarily allowed to continue buying Iranian oil as they showed “significant reduction” in oil purchase from the Persian Gulf country.
Advantage for India

- Chabahar will provide India the much-denied connectivity to enhance trade with landlocked Afghanistan and Central Asian nations.
- The port is critical to its interests and wants to develop it as a counter to Pakistan’s Gwadar port which was built with Chinese assistance.
- The port will allow India to bypass Pakistan to transport goods to Afghanistan and Central Asia using a sea-land route.
- Chabahar Port lies in the Persian Gulf in Iran and will help India in expanding its maritime commerce in the region.
- It also provides opportunities to Indian companies to penetrate and enhance their footprint in the region.
- It is located 76 nautical miles (less than 150km) west of the Pakistani port of Gwadar, being developed by China. This makes it ideal for keeping track of Chinese or Pakistani military activity based out of Gwadar.
- The port will cut transport costs/time for Indian goods by a third.

13. INDIA TO EXPORT SUGAR TO CHINA

Why in news?
In a boost to sugar mills sitting on surplus stocks, India will start raw sugar exports to China in early 2019, and is in talks to finalise exports to Indonesia and Malaysia as well.

Key points
- In a statement, the Commerce Ministry said the first contract to export 50,000 tonnes of sugar had been entered into by the Indian Sugar Mills Association (ISMA) and Chinese public sector company COFCO.
- The decision to export sugar to China had been taken “at the highest level.” When Prime Minister met Chinese President Xi Jinping in April, they had committed to a volume of sugar exports of about two million tonnes.
- Raw sugar is the second product after non-basmati rice that China will import from India.
- It is a move to reduce the $60 billion trade deficit that China has with India. India’s exports to China in 2017-18 amounted to $33 billion while imports from China stood at $76.2 billion.
- The Ministry official said government delegations were also travelling to Malaysia and Indonesia next week, for talks to finalise sugar exports to those countries as well.
- India is the world’s largest sugar producer with a production of 32 million tonnes in 2018. However, domestic consumption is only around 25 million tonnes.

14. CHINA TAPS INDIA AS DIGITAL ECONOMY PARTNER

Why in news?
China has involved India as a digital partner, as part of Beijing’s drive to cyber-connect with Eurasia, its new frontier for trade and investments.

Key Points:
- At a conference on defining common international standards for two-dimensional (2D) barcodes, Chinese officials announced that India is already on board in this global exercise.
- In November 2017 Executive Director of the Global Unified Two-Dimensional Code Registration Management Center (UTC), based in Beijing, signed a strategic cooperation agreement on 2D coding with his Indian counterpart. This resulted in the formation of UTC (India).
In China, there has been a growing awareness of India’s strengths in the pharmaceutical sector and other areas. But the challenge is how to find genuine buyers and sellers. That is where 2D codes become important to solve the problem by eliminating fraudulent buyers and sellers online. So far, only exports of Indian pharmaceuticals and cotton are being funneled through the 2D coding route, though other items are likely to be added in the future.

Analysts say that China appears more inclined to source pharmaceuticals and agro-products from India, following an unabated trade war with the United States.

India’s favourable demography is also helping in building a growing digital-connect with China. “India has a young population, with a median age of 28. Young people are finding it easier to adapt to the digital way of doing business than in some other countries,

15. INDIAN WAR MEMORIAL UNVEILED IN FRANCE

Why in news?
To highlight the contribution of the Indian soldiers to the freedom of France in the Great War (First World War) an Indian War Memorial was unveiled at Villers Guislain in Paris.

Highlights
• It is first of its kind national memorial for the Indian soldiers who died in France during the First World War and features the Ashoka emblem.
• The memorial, constructed by the Government of India through the USI, is distinct from the Indian memorial at Neuve Chapple, which was built by the Commonwealth War Graves Commission.

Indian participation
• The First World War came to an end with the signing of the armistice on November 11, 1918. India contributed more than 1.5 million troops, of which 1.3 million fought overseas across all theatres and, approximately, 72,000 were killed. India Gate in Delhi, which pays homage to the “unknown soldier”, has names of soldiers inscribed on it.
• The Empire’s biggest contribution was by India. This included 3.7 million tonnes of supplies, over 10,000 nurses, 1,70,000 animals, £146m of Indian revenue, and political support — including that of Gandhi, who helped recruit Indian volunteers in the face of nationalist opposition.

Significances
• The world war ended the myth of invincibility of British Empire in India as the British faced many humiliating defeats during the war.
• The soldiers that returned after war raised the morale of masses.
• India supported Britain in world war on its promise of fighting for democracy but serving Indian with Rowlat act immediately after war shattered Indians. This led to the rise of national consciousness and soon Non Cooperation movement was launched.
• Formation of USSR also led to the rise of communism in India with the formation of CPI and imparted a socialist tinge to freedom struggle.

16. SIMBEX-2018

Why in news?
The 25th edition of the India-Singapore bilateral naval exercise, SIMBEX, has commenced at the tri-services command in Port Blair. SIMBEX stands for “Singapore-India Maritime Bilateral Exercises “
Highlights
- Started as basic Anti-Submarine Warfare (ASW) exercises in 1994, today these exercises have graduated to complex maritime combat drills, including missile and torpedo firings, and shore-based intensive professional exchanges.
- Seven ships from the Indian Navy and five ships from the Singapore Navy along with an Archer class submarine and a Deep Submergence Rescue Vehicle were part of the exercise.
- Maritime patrol aircraft of both countries, P8I of Indian Navy and Fokker F50 from Singapore, were also participated.
- The number of missiles and torpedo firings being undertaken are in fact unprecedented and perhaps the largest the Indian Navy has undertaken with any foreign Navy till date.

Background
- In the Shangrila Dialogue PM of India and Prime Minister Lee Hsien Loong of Singapore inked many agreements including those under the ‘Defence and Strategic Partnership Sectors’.
- The two countries have vastly expanded their military cooperation in recent years under India’s Act East policy. Late last year, the two countries signed a naval agreement which has a provision for mutual logistical support and gives India access to the Changi naval base.
- India and Singapore are working on a trilateral exercise with an Association of South East Asian Nations (ASEAN) country, likely Thailand, and eventually plan to scale it up to a multilateral format.

17. SAMUDRA SHAKTI – 2018

Why in news?
The maiden Indo-Indonesia Bilateral Naval Exercise ‘Samudra Shakti 2018’ has commenced at the port of Surabaya, Indonesia.

About Samudra Shakti
- The ‘Samudra Shakti’ bilateral exercise started with Harbour Phase which encompassed planning and briefing on various activities, professional interactions, cross deck visits, sports fixtures, and social interactions.
- The ‘Samudra Shakti’ bilateral exercise was progressed by Sea Phase which included operations such as joint maneuvers, helicopter operations, surface warfare exercise, ASW exercise, and anti-piracy exercises.
- The ‘Samudra Shakti 2018’ bilateral naval exercise is aimed at strengthening bilateral relations, expand maritime co-operation, enhance interoperability and exchange best practices of both the countries.
- The Indian Naval Ship (INS) Rana of the Eastern Fleet based at Visakhapatnam under the Eastern Naval Command, which is deployed in South East Asia arrived at the port of Surabaya to participate in the exercise.

Background
- During the visit of Prime Minister Narendra Modi to Indonesia in May 2018, both the nations agreed to step up their defence and maritime cooperation, raising the level of their ties to a comprehensive strategic partnership.
- India agreed to develop the strategically important Indonesian port Sabang in the Indian Ocean, close to the Andamans and both the sides unveiled a vision document for the Indo-Pacific region, the first of its kind between India and a South-East Asian country, to deal with the increasing presence of China in the area.
18. **10TH ANNIVERSARY OF IONS**

**Why in news?**
10th-anniversary commemorative activities of the Indian Ocean Naval Symposium (IONS) was held at Kochi. The theme for the 10th-anniversary seminar of IONS is “SAGAR” (Security and Growth for All in the Region)

**Highlights**
- As part of the efforts to ‘practicalise’ the interactions, an information fusion centre (IFC) for the Indian Ocean Region would be launched by India’s Defence Minister.
- India is currently chairing the Indian Ocean Naval Symposium (IONS) working group on information sharing and interoperability.
- Efforts had already begun to bring operational relevance to the interactions at IONS, with a multilateral search and rescue exercise at sea coordinated by Bangladesh, chairing the working group on SAR, last year.
- India, in the chair of the working group on humanitarian assistance and disaster relief (HADR), hosted a table top exercise at Visakhapatnam. This was preceded by the preparation of a guidebook on HADR and a listing of the assets possessed by the members for mobilisation during disasters.
- This, along with joint patrols with several nations, EEZ patrols carried out on a regular basis for countries such as the Maldives with their personnel on board Indian ships, bilateral and multilateral exercises, has won the Indian Navy a huge amount of goodwill and trust in the region and beyond.

**Indian Ocean Naval Symposium**
- The Indian Ocean Naval Symposium, commonly known as IONS, is a series of biennial meetings among the littoral states of the Indian Ocean region launched by India in 2008.
- It provides a forum to increase maritime security cooperation, providing a forum for discussion of regional maritime issues and promote friendly relationships among the member nations.
- IONS is a security construct for the Indian Ocean region which is similar to the Western Pacific Naval Symposium.
- It is a voluntary initiative among the navies and maritime security agencies of the member nations.

19. **INDIA VOTES AGAINST UNGA DRAFT RESOLUTION ON USE OF DEATH PENALTY**

**Why in news?**
India has voted against a United Nations General Assembly draft resolution on the use of death penalty, saying it goes against the statutory law of the country where an execution is carried out in the “rarest of rare” cases.

**Highlights**
- The draft resolution, taken up in the Third Committee (Social, Humanitarian, Cultural) of the General Assembly, was approved with a recorded vote of 123 in favour, 36 against and 30 abstentions.
India was among the countries that voted against the resolution, which would have the Assembly call on all States to respect international standards on the rights of those facing death penalty and ensure that it is not applied on the basis of discriminatory laws or as a result of discriminatory or arbitrary application of the law.

The draft resolution’s passage followed an intense debate and Singapore introduced an amendment on behalf of 34 countries that reaffirmed the countries’ sovereign right to develop their own legal system.

The Committee then approved this amendment by a recorded vote of 96 in favour to 73 against, with 14 abstentions. India voted in favour of this amendment.

By its terms, the Assembly would reaffirm the sovereign right of all countries to develop their own legal systems, including determining appropriate legal penalties, in accordance with their international law obligations.

Singapore’s delegate decried the draft resolution’s “one-size-fits-all” approach to a delicate question, which seeks to impose a particular vision of the world onto others.

The representative of Singapore said the amendment aimed to ensure respect for the diversity of views.

20. INDIA TO JOIN ‘QUAD’ TALKS IN SINGAPORE

Why in news?
Senior officials of the 'Quad' countries India, Japan, Australia and the US are meeting in Singapore to reaffirm a "shared commitment" to strengthen an Indo-Pacific region.

Highlights
- The meeting will be held a year after it was launched in Manila during the ASEAN.
- The principles of our Indo-Pacific region is that it should be free and inclusive where countries should respect international laws.
- India and Japan have recently announced a series of joint projects along what they have called the “Asia-Africa growth corridor” in the Indo-Pacific region.
- Among the projects that they will work together on are the Jamuna Railway bridge in Bangladesh and other bridges in northeastern States of India, housing, school and electricity projects in Rohingya areas in Myanmar, an LNG plant in Sri Lanka and a cancer hospital in Kenya.
- The Quad grouping has met at official level despite some divergences in the last year.
- To begin with, India is yet to agree to Australia’s request to join the Malabar exercises; officials also said it was still “too early” to discuss “militarising” the Quad.

Stands of India
- India has resisted raising the level of talks from an official to the political level. India has not admitted Australia in the Malabar exercises with the U.S. and Japan, despite requests from Canberra.
- The reason for India’s resistance is its apprehension that Indo-Pacific merely means an Indian military commitment to the US-led alliances in the Pacific Ocean. There is no reciprocal US commitment to issues of Indian concern relating to the Arabian Sea and the Persian Gulf, two of the most important external areas for India.
- Also, Prime Minister speech at the Shangri-La dialogue clarified that “India doesn’t see the Indo-Pacific Region as a strategy or as a club of limited members” underlines New Delhi’s attempt to distinguish the Quad from the Indo-Pacific.
21. INDIA TO TOP US AS 2ND-LARGEST CARBON EMITTER FROM POWER: INTERNATIONAL ENERGY AGENCY

Why in news?
On November 13, 2018, according to the report by the International Energy Agency titled ‘World Energy Outlook’, India would surpass US as the 2nd biggest emitter of carbon dioxide from the power sector in the world after China.

Why in news?
- Carbon dioxide emissions from India’s power sector are expected to rise to nearly 80 percent by 2040 as power use almost triples, driven in part by air conditioning, the Paris-based IEA said in the report.
- China will remain the biggest emitter.
- Two-thirds of India’s households are projected to own an air conditioning unit over that period, a 15-fold increase from today, according to the IEA.
- India’s electricity demand for cooling is set to increase by as much as 700 percent over the period, assuming no major improvements in the country’s air conditioning efficiency.
- Even with the jump in power demand and emissions, India’s per-capita electricity consumption will remain one of the world’s lowest, according to the report.
- India and Southeast Asia combined are the growth centres for coal-fired power, with demand more than doubling over the period to 2040.

International Energy Agency (IEA)
- IEA is an inter-governmental organization established in 1974 as per framework of Organisation for Economic Co-operation and Development (OECD).
- It was established in the wake of the 1973 oil crisis after the OPEC cartel had shocked the world with a steep increase in oil prices. Presently it has 30 member countries including India. It is headquartered in Paris, France.
- Its prime focus is on the “3Es” of effectual energy policy: energy security, economic development and environmental protection. It also seeks to promote alternate energy sources (including renewable energy), rational energy policies and multinational energy technology co-operation.

22. 13TH EAST ASIA SUMMIT

Why in news?
13th East Asia Summit was inaugurated in Singapore, during which the leaders of the grouping discussed global and regional issues, including maritime cooperation. India has been participating in the East Asia Summit since its inception in 2005.

Key points
- The East Asia Summit is a unique Leaders-led forum of 18 countries of the Asia-Pacific region.
- The East Asia Summit was formed to further the objectives of regional peace, security and prosperity.
- Established in 2005, EAS allows the principal players in the Asia-Pacific region to discuss issues of common interest and concern, in an open and transparent manner, at the highest level.
- The membership of EAS consists of ten ASEAN Member States (i.e. Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Singapore, Thailand, the Philippines and Vietnam), Australia, China, India, Japan, New Zealand, Republic of Korea, Russian Federation and the USA.
• There are six priority areas of regional cooperation within the framework of the EAS.
• These are – Environment and Energy, Education, Finance, Global Health Issues and Pandemic Diseases, Natural Disaster Management, and ASEAN Connectivity.

23. INDIAN ARMY ZEROES IN ON RUSSIAN IGLA-S MISSILE

Why in news?
After a series of delays, Russia has been declared the lowest bidder in the Army’s multi-billion dollar deal for Man Portable Air Defence Systems (MANPADS). It will soon be supplying $1.3 bn very short range air defense or VSHORAD program missile system to the Indian Army.

Highlights
• The declaration of the Russian bid as the lowest, which was reached after a series of delays that saw several trials and retrials, still doesn’t guarantee a certain transaction given some concerns about the possible threat of U.S. sanctions for arms purchases from Russia.
• First issued in October 2010, the Request for Proposal (RFP) was for over 5,000 missiles, 258 single launchers and 258 multi-launchers estimated to cost ₹6,400 crore.
• Five contenders responded and eventually three made it to the trials that began in 2012.

Rubicon:
• IGLA-S (SA-24) is the latest model of Russian MANPADS technology offered to the Indian Army.
• It offers superior performance over the earlier supplied SA-18 missiles to India which is in use since 1980s.
• Iglas system is designed for use against visible targets as tactical aircraft, helicopters, unmanned aerial vehicle, cruise missile, head-on or receding, in the presence of natural (background) clutter and counter measures.
• As per requirements, the system should have a maximum range of 6km, altitude of 3km along with all-weather capability and will replace the existing Igla in service which is in urgent need of replacement.

IGLA-S
• IGLA-S (SA-24) is the latest model of Russian MANPADS technology offered to the Indian Army.
• It offers superior performance over the earlier supplied SA-18 missiles to India which is in use since 1980s.
• Iglas system is designed for use against visible targets as tactical aircraft, helicopters, unmanned aerial vehicle, cruise missile, head-on or receding, in the presence of natural (background) clutter and counter measures.
• As per requirements, the system should have a maximum range of 6km, altitude of 3km along with all-weather capability and will replace the existing Igla in service which is in urgent need of replacement.
24. 4-DAY REGIONAL MEETING OF WORLD CUSTOMS ORGANISATION HELD IN JAIPUR

Why in news?
A four-day regional meeting of the World Customs Organisation was held in Jaipur, Rajasthan with representatives of 33 member countries of Asia attending it.

Key points
- The meeting is slated to deliberate upon various issues including the steps required for the capacity building and reforms in customs.
- The participants were also discussed and deliberated upon the amended Kyoto protocol, digital customs, e-commerce among other issues.
- A summary of various efforts made by the National Trade Facilitation Committee for trade facilitation would also be tabled in the meeting. The meeting is being jointly chaired by WCO Deputy Secretary General Ricardo Travino and Central Board of Indirect Taxes and Customs Chairman S Ramesh.

The World Customs Organization (WCO)
- The World Customs Organization (WCO) is an intergovernmental organization
- Headquarters at Brussels, Belgium
- It has 182 member nations (including India) that manage more than 98% of world trade.
- The WCO maintains the international Harmonized System (HS) goods nomenclature, and administers the technical aspects of the World Trade Organization (WTO) Agreements on Customs Valuation and rules of origin.

25. INDIA, PAK COMMIT TO KARTARPUR CORRIDOR

Why in news?
India and Pakistan exchanged letters committing to build the required infrastructure for visa-free direct travel by Indian Sikh pilgrims to Pakistan’s Kartarpur Sahib Gurdwara.

Highlights
- A Cabinet meeting in Delhi proposed building a passage for the pilgrims accessible “365 days and 24 hours. Hours later, the Cabinet decision was conveyed by Ministry of External Affairs in a letter to the Pakistan High Commission in Delhi.
- The Cabinet also decided that preparations for the 550th anniversary of the founder of the Sikh faith will be overseen by Home Minister, which will include the setting up of a “centre for interfaith studies” in Amritsar, University Chairs in U.K. and Canada for the study of Guru Nanak, and a railway train connecting holy sites for the community.
- The Kartarpur Sahib corridor was first proposed in 1999 when Prime Minister Atal Bihari Vajpayee took a bus ride to Lahore, as a long-standing demand from the Sikh community for easy access to the revered shrine across the border where Guru Nanak spent the last 18 years of his life.
26. INDO-US JOINT MILITARY EXERCISE 'VAJRA PRAHAR' COMMENCES IN JAIPUR

Why in news?
The 12-day long joint military exercise between India and the United States known as 'Vajra Prahar' commenced in Jaipur.

Highlights
- The exercise was called between Special Forces of both countries to deal with operations for counter-terrorism and is being done at the unit as well as sub-unit levels.
- The contingents of both countries in this exercise will train on aspects such as hostage rescue, building intervention, desert survival, medical aid and combat ring. At the end of training, they will undertake a three-day outdoor exercise to validate their best practices.
1. NO ‘LESS CASH’ TWO YEARS POST NOTE BAN

Why in news?
November 8, 2018 marks the second anniversary of the demonetisation exercise. It was on the same day in 2016 that Prime Minister announced that Rs. 1,000 and Rs. 500 currency notes would no longer be legal tender.

Highlights
- These notes constituted over 86% of the currency in circulation, then.
- One of the objectives of demonetisation was to move to a ‘less-cash’ society.
- However, two years down the line, it appears the objective has not been achieved.
- According to Reserve Bank of India (RBI) data, currency in circulation rose to Rs. 19.6 lakh crore as on October 26, 2018, a 9.5% growth from two years ago.
- With cash back in the system, ATM withdrawals have picked up.
- Mobile banking transactions in August 2018 stood at Rs. 2.06 lakh crore, 82% higher than the October 2016 figure of Rs. 1.13 lakh crore.

Money trail
- Currency in circulation increased to ₹19.6 lakh crore as on Oct 26, 2018, from ₹17.9 lakh crore on Nov 4, 2016
- Cash withdrawals from ATMs in Oct. 2016 were ₹2.54 lakh crore, while the number for August 2018 was ₹2.75 lakh crore – a growth of 8%
- ATM withdrawals had crashed to ₹1.06 lakh crore in December 2016
- Mobile banking transactions rose to ₹2.06 lakh crore in Aug. 2018 from ₹1.13 lakh crore in October 2016

SOURCE: RBI DATA

2. DREDGING CORPORATION OF INDIA

Why in news?
Cabinet Committee on Economic Affairs (CCEA) has approved strategic disinvestment of 100% Government of India’s shares in Dredging Corporation of India Limited (DCIL) to consortium of four ports.

Highlights
- The consortium of four ports consists of Vishakhapatnam Port Trust (Andhra Pradesh), Paradeep Port Trust (Odisha), Jawahar Lal Nehru Port Trust (Maharashtra), Kandla Port Trust (Gujarat).
- Presently, Central Government holds 73.44% shares in DCIL.

Benefits:
- Strategic sale of DCIL will further facilitate linkage of dredging activities with ports, keeping in view the role of DCIL in expansion of dredging activity in the country as well as potential scope for diversification of ports into third party dredging.
Dredging Corporation of India Limited (DCIL):
- It is miniratna public sector unit (PSU) engaged in the business of dredging. It was established in March 1976 and is headquartered in Visakhapatnam, Andhra Pradesh. It reports to the Ministry of Shipping.
- It does dredging for Indian seaports exclusively. It is involved in capital dredging, beach nourishment, and land reclamation.

FLIPKART, AMAZON NOT VIOLATING NORMS: CCI

Why in news?
Fair trade watchdog Competition Commission of India (CCI) has concluded that the business practices of Flipkart and Amazon are not in violation of competition norms and rejected allegations of abuse of market dominance made by a grouping of online vendors. CCI, in its ruling, also made it clear that any intervention in the evolving e-commerce market place needs to be “carefully crafted” to ensure that innovations are not stifled.

CCI
- Competition Commission of India is a statutory body of the Government of India responsible for enforcing The Competition Act, 2002 throughout India and to prevent activities that have an appreciable adverse effect on competition in India.
- It was established on 14 October 2003. It became fully functional in May 2009 with Dhanendra Kumar as its first Chairman

Objectives of CCI
- Make the markets work for the benefit and welfare of consumers.
- Ensure fair and healthy competition in economic activities in the country for faster and inclusive growth and development of economy.
- Implement competition policies with an aim to effectuate the most efficient utilisation of economic resources.
- Develop and nurture effective relations and interactions with sectoral regulators to ensure smooth alignment of sectoral regulatory laws in tandem with the competition law.
• Effectively carry out competition advocacy and spread the information on benefits of competition among all stakeholders to establish and nurture competition culture in Indian economy

4. STRATEGIC PETROLEUM RESERVES (SPR)

Why in news?
The Union Cabinet has approved the filling of Padur Strategic Petroleum Reserves (SPR) in Karnataka by overseas National Oil Companies (NOCs).

Highlights
• The filling of the SPR will be under PPP model and is being undertaken to reduce budgetary support of Union Government. The SPR facility at Padur is underground rock cavern with total capacity of 2.5 million metric tonnes (MMT) having four compartments of 0.625 MMT each.

Background:
India has built 5.33 million tons of underground reserves in three locations, including Padur, under an earlier phase that can meet 9.5 days of the country’s oil needs. The government purchased crude to fill the caverns in Visakhapatnam in Andhra Pradesh and half of another facility in Mangalore in Karnataka, while leasing out the other half to Abu Dhabi National Oil Co.

About SPR programme:
• To ensure energy security, the Government of India had decided to set up 5 million metric tons (MMT) of strategic crude oil storages at three locations namely, Visakhapatnam, Mangalore and Padur (near Udupi). These strategic storages would be in addition to the existing storages of crude oil and petroleum products with the oil companies and would serve as a cushion during any external supply disruptions.
• In the 2017-18 budget, it was announced that two more such caverns will be set up Chandikhole in Jajpur district of Odisha and Bikaner in Rajasthan as part of the second phase.
• The construction of the Strategic Crude Oil Storage facilities is being managed by Indian Strategic Petroleum Reserves Limited (ISPRL), a Special Purpose Vehicle, which is a wholly owned subsidiary of Oil Industry Development Board (OIDB) under the Ministry of Petroleum & Natural Gas.

Need for strategic oil reserves:
• In 1990, as the Gulf war engulfed West Asia, India was in the throes of a major energy crisis. By all accounts India’s oil reserves at the time were adequate for only three days. While India managed to avert the crisis then, the threat of energy disruption continues to present a real danger even today.
• It is unlikely that India’s energy needs will dramatically move away from fossil fuels in the near future. Over 80% of these fuels come from imports, a majority of which is sourced from West Asia. This is a major strategic risk and poses a massive financial drain for an embattled economy and its growing current account deficit.
• To address energy insecurity, the Atal Bihari Vajpayee government mooted the concept of strategic petroleum reserves in 1998. Today, with India consuming upwards of four million barrels of crude every day (January 2015 figures), the case for creating such reserves grows stronger.
5. CREDIT GROWTH AT 5-YEAR HIGH

Why in news?
In what could be an indication of a pick-up in private investment, loan growth of commercial banks is at a five-year high on the back of strong demand, latest data released by Reserve Bank of India (RBI) showed.

Highlights
- According to the data, year-on-year credit growth was 14.6% as on October 26, the highest in five years.
- In October 2013, credit growth was 16.6%.
- “The credit growth is broad-based. There is loan demand from large corporates, for road projects, and also non-banking finance companies.
- The uptick in credit growth comes amid rising interest rates. The central bank has been increasing rates though there was a pause in the previous policy meeting in October, after two consecutive hikes.
- The next review of the monetary policy is due in December 2018.
- Banks have also been increasing their lending rate since March 2018.
- SBI, for example, has increased its one-year marginal cost of fund based lending rate (MCLR) — the benchmark rate to which all loans are linked — by 55 basis points since March 1.

MCLR
- The marginal cost of funds based lending rate (MCLR) refers to the minimum interest rate of a bank below which it cannot lend, except in some cases allowed by the RBI. It is an internal benchmark or reference rate for the bank.
- MCLR actually describes the method by which the minimum interest rate for loans is determined by a bank - on the basis of marginal cost or the additional or incremental cost of arranging one more rupee to the prospective borrower.

6. PRIME MINISTER LAUNCHES EASE OF DOING BUSINESS GRAND CHALLENGE

Why in news?
Prime Minister launched the Ease of Doing Business grand challenge on resolving seven identified ease of doing business problems with the use of cutting-edge technologies.

Ease of Doing Business Ranking
- The Doing Business Ranking is an annual assessment conducted by the World Bank that measures aspects of regulation affecting 10 areas of the life of a business, evaluating 190 countries on 10 specific indicators.
- The 10 indicators include starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority interests, paying taxes, trading across borders, enforcing contracts and resolving insolvency.
- The scores are based on the measures implemented by the Government departments, however, they also reflect the experience of industry users that is counted in the rankings.

EODB Grand Challenge
- Ease of doing business signifies the ease of getting permission, license, registration or a service from a government agency. There are established processes within each government agency for issuing of such permissions or services.
- Hence, the grand challenge seeks to invite innovative ideas from individuals, startups or other enterprises to implement artificial intelligence, Big Data Analytics, Internet of Things (IoT), Blockchain and other cutting-edge technologies for re-engineering related...
Government processes to eliminate physical interface, improve service delivery, enhance transparency and reduce cost and time.

**Highlights**
- The EODB grand challenge is open to all young Indians, start-ups and private enterprises. The main purpose is to provide solutions to complex problems using current technology.
- The platform for the grand challenge will be the Start-up India portal.
- The top 3 teams for each problem statement would be awarded cash prizes.
- The government would be working with all the winners for solution development and implementation.

**Background**
- In the World Bank's Doing Business Report (DBR, 2019) released on October, 2018 India recorded a jump of 23 positions from 100 in 2017 to 77 in 2018, among a total of 190 countries.
- India also recorded the highest improvement in two years by any large country since 2011 in the Doing business assessment by improving its rank by 53 positions.
- India improved its rank in 6 out of 10 indicators and has moved closer to international best practices (Distance to Frontier score) on 7 out of the 10 indicators.
- In the grant of construction permits, India's rank improved from 181 in 2017 to 52 in 2018, an improvement of 129 ranks in a single year.
- In Trading across Borders, India's rank improved by 66 positions moving from 146 in 2017 to 80 in 2018.
- The World Bank has recognised India as one of the top improvers for the year. This is the second consecutive year for which India has been recognised as one of the top improvers.

7. **50% ATMS WILL BE SHUT BY 2019: INDUSTRY BODY**

**Why in news?**
About 1.13 lakh of the 2.38 lakh automated teller machines (ATMs) in the country will have to shut down by 2019 as operations will not remain viable, the Confederation of ATM Industry (CATMi), the apex body of the domestic ATM industry said.

**Highlights**
- The figure includes about one lakh off-site ATMs and a little over 15,000 white label ATMs.
- A large number of ATMs in non-urban locations may be shut down due to unviability of operations.
- The industry body said the forced closure would be on account of unviability of operations brought about by recent regulatory guidelines for ATMs hardware and software upgrades, recent mandates on cash management standards, and the ‘Cassette Swap’ method of loading cash.
- If a large number of ATMs had to stop operations, then the financial inclusion programme would be severely impacted as millions of beneficiaries under the government’s Pradhan Mantri Jan Dhan Yojana scheme, who withdrew subsidies through ATMs, may find their neighbourhood ATM shut, CATMi said.
- CATMi said that its members were already reeling under the financial impact caused by huge losses during and post-demonetisation as cash supply was impacted and remained inconsistent for months.
- Unless banks stepped in to bear the additional cost of compliance, ATMs would have to shut down.
What are Brown Label ATMs?

- In case of Brown Label ATMs, service providers own the hardware of ATM machine. The responsibility of identifying ATM site, lease agreement with landlord, power supply to ATM kiosk lies with the service provider.
- Thus, service provider takes the responsibility of maintenance of the ATM whereas sponsor bank takes the responsibility of cash management and provide connectivity to ATM to banking network.
- Logo of sponsor bank is displayed on brown label ATM kiosk premises. Brown Label ATMs are most cost effective solution for the banks.

What are White Label ATMs?

- White Label ATMs are owned and operated by Non Banking Financial Companies (NBFC). RBI has granted license or permission to non-banking entities to open such ATMs. Any non-banking entity with a minimum net worth of ₹ 100 crore can apply for white label ATM.
- NBFCs rely on sponsor bank to settle all issues related to cash management, transaction settlement with other banks etc. Customers with debit card of any bank may withdraw cash from such ATMs but they will have to pay a fee for the services.
- Unlike Brown Label ATMs, White Label ATMs will not display logo of any bank like SBI, CANARA BANK, PNB ETC. Logo of White Label ATM operator like Tata Indicash, Muthoot Finance etc.
- Setting up of White Label ATMs are beneficial for customers as well as banks. With the expansion of ATM network, there will more locations where it will be convenient for customers to withdraw cash.
- White Label ATMs also reduce the pre transaction cost for banks and there is no hassle to maintain and run such a payment channel.
- White label atm and brown label atm:

<table>
<thead>
<tr>
<th>White label ATM</th>
<th>Brown Label ATM</th>
</tr>
</thead>
<tbody>
<tr>
<td>When ATMs are owned and operated by non-bank entities but they are not doing 'outsourcing-contract' from a particular bank.</td>
<td>When banks outsourced the ATM operations to a third party.</td>
</tr>
<tr>
<td>The private company owns &amp; operates the ATM machine, pays office rent. They negotiate with the landlord, electricity company, telecom company and so on.</td>
<td>Same</td>
</tr>
<tr>
<td>Sponsor bank provides the cash.</td>
<td>The bank (which has outsourced this work) provides cash for that ATM.</td>
</tr>
<tr>
<td>No. White label ATM doesn't have such logo. Not even of the sponsor bank.</td>
<td>ATM has logo of that bank (which has outsourced this work).</td>
</tr>
<tr>
<td>They’ve to compulsorily open a few ATMs in (tier 3 to tier 6) areas.</td>
<td>No such compulsion.</td>
</tr>
<tr>
<td>RBI directly involved because these white label Companies have to separately get license/permission from RBI to run business.</td>
<td>RBI not involved directly. These outsourcing companies have contractual obligation with their respective banks.</td>
</tr>
</tbody>
</table>
8. SEBI SIMPLIFIES REGULATIONS FOR RECLASSIFYING PROMOTER AS PUBLIC INVESTOR

Why in news?
The Securities and Exchange Board of India (SEBI) has come out with new rules for re- classification of a promoter as a public investor, wherein an outgoing promoter will have to relinquish special rights as well as control over the affairs of the listed firm and not be allowed to hold over 10% stake.

Highlights
- Besides, the promoter would not be allowed to have any representation on the board of directors or act as a key managerial person in the listed entity.
- Further, the promoter seeking re-classification must not be a wilful defaulter or a fugitive economic offender, the SEBI said in a notification dated November 16.
- In order to ensure that only compliant listed entities are eligible to apply for re-classification, SEBI said such listed firms need to be compliant with 25% minimum public shareholding requirement; their shares should not have been suspended from trading and they must not have any outstanding dues to the regulator, exchanges and depositories.
- In all cases of re-classification of promoters, the proposal needs to be placed by the listed entity before shareholders and approved through ordinary resolution.

9. NBFC Mudra loans grew faster than banks in FY18: report by MUDRA

Why in news?
NBFCs sanctioned only over ₹27,000 crore of Mudra loans in FY18 against ₹92,492.68 crores by public sector banks, According to the 2017-18 annual report of Pradhan Mantri Mudra Yojana (PMMY).

Highlights
- By this move NBFCs not only met their Mudra target of ₹9,050 crore for FY18, but their sanctions for the year were a five-fold jump from the previous year.
- Among the public banks, State Bank of India (SBI) was the top lender followed by Canara Bank and Punjab National Bank (PNB).

About Pradhan Mantri Mudra Yojana (PMMY)
- Launched in April, 2015.
- For refinancing collateral-free loans given by the lenders to small borrowers, three types of loans under PMMY:
  - Shishu (up to Rs.50,000)
  - Kishore (from Rs.50,001 to Rs.5 lakh)
  - Tarun (from Rs.500,001 to Rs.10,00,000).

10. 19TH MEETING OF THE FINANCIAL STABILITY AND DEVELOPMENT COUNCIL (FSDC)

Why in news?
The 19th Meeting of the Financial Stability and Development Council (FSDC) to review the current global and domestic economic situation and financial sector performance was held

Highlights of the Meet
- The Council discussed at length the issue of real interest rate, current liquidity situation, including segmental liquidity position in NBFCs and mutual fund space.
The Council decided that the Regulators and the Government would keep a close watch on the developing situation and take all necessary measures.

I. Cyber Security

- FSDC took note of the developments regarding strengthening of Cyber Security in the Financial Sector.
- It included progress made towards setting up of a Computer Emergency Response Team in the Financial Sector (CERT-Fin) under a Statutory Framework.
- The Council also deliberated on the need for identifying and securing critical information infrastructure in the financial sector.

II. Cryptocurrency

- The Council also deliberated on the issues and challenges of Crypto Assets/Currency and decided to devise an appropriate legal framework to ban use of private crypto-currencies in India.
- The panel encouraging the use of Distributed Ledger Technology, as announced in the Budget 2018-19.

III. Other discussions

- Other issues discussed include market developments and financial stability implications of the use of RegTech and SupTech (IT enabled regulatory process) by Financial Firms and Regulatory and Supervisory Authorities.
- It also discussed implementing the Recommendations of the Sumit Bose Committee Report on measures, such as, promoting appropriate disclosure regime for financial distribution costs.

Financial Stability and Development Council (FSDC)

- FSDC is an apex-level body constituted by the Government of India to create a super regulatory body as mooted by the Raghuram Rajan Committee in 2008.
- Finally in 2010, the then Finance Minister of India, Pranab Mukherjee, decided to set up such an autonomous body dealing with macro prudential and financial regularities in the entire financial sector of India.
- An apex-level FSDC is not a statutory body. No funds are separately allocated to the council for undertaking its activities.

Composition

Chairperson: The Union Finance Minister of India

Members:

- Governor Reserve Bank of India (RBI),
- Finance Secretary and/ or Secretary, Department of Economic Affairs (DEA),
- Secretary, Department of Financial Services (DFS),
- Secretary, Ministry of Corporate Affairs,
- Chief Economic Advisor, Ministry of Finance.
- Other members include chairman of SEBI, IRDA, PFRDA and IBBI

Responsibilities

- Financial Stability
• Financial Sector Development
• Inter-Regulatory Coordination
• Financial Literacy
• Financial Inclusion
• Macro prudential supervision of the economy including the functioning of large financial conglomerates
• Coordinating India’s international interface with financial sector bodies like the Financial Action Task Force (FATF), Financial Stability Board (FSB) and any such body as may be decided by the Finance Minister from time to time.

11. INDIA AT 77 RANK IN WORLD BANK’S DOING BUSINESS REPORT, 2018

Why in news?

India’s Performance
• India has recorded a jump of 23 positions against its rank of 100 in 2017.
• It is placed now at 77th rank among 190 countries with a leap of 23 ranks.
• The DBR ranks countries on the basis of Distance to Frontier (DTF), a score that shows the gap of an economy to the global best practice.
• This year, India’s DTF score improved to 67.23 from 60.76 in the previous year.
• As a result of continued efforts by the Government, India has improved its rank by 53 positions in last two years and 65 positions in last four years.

Doing Business Assessment of India
• The Doing Business assessment provides objective measures of business regulations and their enforcement across 190 economies on ten parameters affecting a business through its lifecycle.
• India has improved its rank in 6 out of 10 indicators and has moved closer to international best practices (Distance to Frontier score) on 7 out of the 10 indicators.

Important features of India’s performance this year are
• The World Bank has recognized India as one of the top improvers for the year.
• This is the second consecutive year for which India has been recognized as one of the top improvers.
India is the first BRICS and South Asian country to be recognized as top improvers in consecutive years.

India has recorded the highest improvement in two years by any large country since 2011 in the Doing business assessment by improving its rank by 53 positions.

As a result of continued performance, India is now placed at first position among South Asian countries as against 6th in 2014.

12. SEYCHELLES ISSUES WORLD’S 1ST ‘BLUE BOND’

Why in news?
Seychelles has raised 15 million dollars by offering the world’s first ‘Blue Bond,’ raised from investors to finance ocean-based projects, to expand its marine protected areas and boost its fisheries sector.

World’s First Blue Bond

- The blue bond was officially issued on October 9, ahead of the first-ever global conference on the blue economy, which will be held at the end of November in Kenya.
- It is partially guaranteed by a USD 5 million guarantee from the World Bank (IBRD) and is further supported by a USD 5 million concessional loan from the Global Environment Facility (GEF) which will partially cover interest payments for the bond.
- Proceeds from the bond will be utilised for the expansion of marine protected areas, improved governance of priority fisheries and the development of the Seychelles’ blue economy.
- Grants will be provided through the Blue Grants Fund and will be managed by the Seychelles’ Conservation and Climate Adaptation Trust (SeyCCAT).

Benefits of the Bond

- The Blue Bond is a part of an initiative that combines public and private investment to mobilise resources for empowering local communities and businesses.
- It is aimed to assist Seychelles in achieving a transition to sustainable fisheries and safeguarding oceans.

About Seychelles: Seychelles is an archipelago country in the Indian Ocean. The capital of the 115-island country, Victoria, lies 1,500 kilometres (932 mi) east of mainland East Africa. Other nearby island countries and territories include Comoros, Mayotte (region of France), Madagascar, Reunion (region of France) and Mauritius to the south. With a population of roughly 94,228, it has the smallest population of any sovereign African country.

Seychelles is a member of the African Union, the Southern African Development Community, the Commonwealth of Nations, and the United Nations. After proclamation of independence from the United Kingdom in 1976, Seychelles has
developed from a largely agricultural society to a market-based diversified economy, with agriculture being supplanted by rapidly rising service and public sectors as well as tourism.

13. PM LAUNCHES HISTORIC SUPPORT AND OUTREACH INITIATIVE FOR MSME SECTOR

Why in news?
Hon'ble PM has launched a historic support and outreach programme for the Micro, Small and Medium Enterprises (MSME) sector. As part of this programme, the Prime Minister unveiled 12 key initiatives which will help the growth, expansion and facilitation of MSMEs across the country.

Five key aspects for facilitating the MSME sector
1. Access to credit,
2. Access to market
3. Technology upgradation
4. Ease of doing business and
5. Security for employees

Key Initiatives
Access to Credit
59 minute loan portal
- Loans upto Rs. 1 crore can be granted in-principle approval through this portal, in just 59 minutes.
- This portal will be made available through the GST portal.
- 2 percent interest subvention for all GST registered MSMEs, on fresh or incremental loans.

TReDS compliance
- All companies with a turnover more than Rs. 500 crore, must now compulsorily be brought on the Trade Receivables e-Discouning System (TReDS).
- Joining this portal will enable entrepreneurs to access credit from banks, based on their upcoming receivables.
- This will resolve their problems of cash cycle.

Access to Markets
- The public sector companies have now been asked to compulsorily procure 25 percent, instead of 20 percent of their total purchases, from MSMEs.
- Out of the 25 percent procurement mandated from MSMEs, 3 percent must now be reserved for women entrepreneurs.
- He said transactions worth more than Rs. 14,000 crore have been made so far through GeM (Govt. E Market).
- All public sector undertakings of the Union Government must now compulsorily be a part of GeM.

Technology Upgradation
- PM announced establishment of tool rooms across the country as they are a vital part of product design.
- 20 hubs will be formed across the country, and 100 spokes in the form of tool rooms will be established.
Ease of Doing Business
• Clusters will be formed of pharma MSMEs and 70 percent cost of establishing these clusters will be borne by the Union Government.
• The announcement focused on simplification of government procedures. The return under 8 labour laws and 10 Union regulations must now be filed only once a year.
• As part of establishing a unit, an entrepreneur needs two clearances namely to establish.
• The Environmental clearance and consent under air pollution and water pollution laws have been merged as a single consent and self certifications.
• For minor violations under the Companies Act, the entrepreneur will no longer have to approach the Courts, but can correct them through simple procedures.

14. COMPANIES AMENDMENT (ORDINANCE), 2018

Why in news?
The recommendation of the Union Cabinet for promulgation of the Companies Amendment (Ordinance), 2018 has been assented to by the President of India. The Ordinance is promulgated to review offences under the Companies Act, 2013.

Key Amendments

1. **Shifting of the jurisdiction of 16 types** of corporate offences from the special courts to in-house adjudication, which is expected to reduce the case load of Special Courts by over 60%, thereby enabling them to concentrate on serious corporate offences.
2. **The penalty has been reduced to half** for small companies and one person companies of that applicable to normal companies.
3. **Instituting a transparent and technology driven in-house adjudication mechanism** on an online platform and publication of the orders on the website.
4. **Strengthening in-house adjudication** mechanism by necessitating a concomitant order for making good the default at the time of levying penalty, to achieve the ultimate aim of achieving better compliance.
5. **Declogging the NCLT by:**
   • enlarging the pecuniary jurisdiction of Regional Director by enhancing the limit up to Rs. 25 Lakh as against earlier limit of Rs. 5Lakh under Section 441 of the Act;
   • vesting in the Central Government the power to approve the alteration in the financial year of a company under section 2(41); and
   • vesting the Central Government the power to approve cases of conversion of public companies into private companies

15. INSPIRE 2018 / ENERGY EFFICIENCY SERVICES LIMITED (EESL)

Why in news?
The second edition of International Symposium to Promote Innovation & Research in Energy Efficiency (INSPIRE) is being organised by Energy Efficiency Services Limited (EESL) and World Bank.

**INSPIRE 2018**
- INSPIRE 2018 has been organised in collaboration with the Bureau of Energy Efficiency (BEE), The Energy & Resources Institute (TERI), ADB, UNEP, and the Administrative Staff College of India (ASCI).
- The three-day symposium will focus on enhancing grid management, e-Mobility, financial instruments and technologies for energy efficiency in India.
- The event is bringing together policy-makers, innovators and various stakeholders to deliberate on key energy policies, market transformation strategies, and sustainable business models.
- This will help leverage the full potential of energy efficiency and bring its multiple co-benefits to the fore.

**Energy Efficiency Services Limited (EESL)**
- EESL under the administration of Ministry of Power is working towards mainstreaming energy efficiency and is implementing the world’s largest energy efficiency portfolio in the country.
- EESL aims to create market access for efficient and future-ready transformative solutions that create a win-win situation for every stakeholder.
- EESL has pioneered innovative business approaches to successfully roll-out large-scale programs that allow for incentive alignment across the value chain and rapidly drive transformative impact.
- EESL aims to leverage this implementation experience and explore new overseas market opportunities for diversification of its portfolio.
- As on date, EESL has begun its operations in UK, South Asia and South-East Asia.

16. **MEGA FOOD PARK SCHEME**

**Why in news?**
Union Minister for Food Processing Industries has inaugurated the second Mega Food Park in Maharashtra.

- A 3rd Mega Food Park has been sanctioned by the Ministry in Maharashtra and is under implementation in Wardha District while the first Park was inaugurated on 1st of March 2018 in Satara district.
- The Paithan Mega Food Park has been set up in 102 acre of land at a cost of Rs. 124.52 crore.

**Benefits of Mega Food Park**
- The Mega Food Park will leverage an additional investment of about Rs. 250 crore in 25-30 food processing units in the park and would eventually lead to a turnover of about Rs. 450-500 crore annually.
- The Park will also provide direct and indirect employment to 5,000 persons and benefit about 25,000 farmers in the CPC and PPC catchment areas.
- The modern infrastructure for food processing created at Park will benefit the farmers, growers, processors and consumers of Maharashtra and adjoining areas immensely and
prove to be a big boost to the growth of the food processing sector in the State of Maharashtra.

**Mega Food Park Scheme**

- India aims to be a resilient food economy and the Food Factory of the World as the government has made Food Processing a major thrust area of ‘Make in India’.
- Aimed at giving a major boost to the food processing sector by adding value and reducing food wastage at each stage of the supply chain with particular focus on perishables MoFPI is implementing Mega Food Park Scheme in the country.
- Mega Food Parks create modern infrastructure facilities for food processing along the value chain from farm to market with strong forward and backward linkages through a cluster based approach.
- Common facilities and enabling infrastructure is created at Central Processing Centre and facilities for primary processing and storage is created near the farm in the form of Primary Processing Centers (PPCs) and Collection Centers (CCs).
- Under the Scheme, Government of India provides financial assistance upto Rs. 50.00 Crore per Mega Food Park project.

17. **EASE OF DOING BUSINESS GRAND CHALLENGE**

**Why in news?**

The PM has launched the Ease of Doing Business Grand Challenge.

**EoDB Grand Challenge**

- The objective of this challenge is to invite innovative ideas based on Artificial Intelligence, Internet of Things, Big Data Analytics, Blockchain and other cutting edge technology to reform Government processes.
- The aim is to make India a 5 trillion dollar economy in the shortest possible time.
- The platform for the Grand Challenge is the Startup India Portal.

**Improving EoDB in India**

- India’s EoDB rank has improved by 65 spots in past few years.
- India now ranks first in South Asia, and is just some steps away from the Top 50 target.
- The Prime Minister said that the Union Government has laid stress on Policy Driven Governance and Predictable Transparent Policies. He said
- In the last four years, more than 1400 archaic laws have been repealed.
- Dramatic reductions have been achieved in areas such as time taken for resolution of commercial disputes, and time taken for clearing imported goods.
- Organizations such as IMF and Moody’s appear confident and optimistic about India’s future.
18. AIRSEWA 2.0

Why in news?
The Ministry of Civil Aviation has launched the upgraded version of AirSewa 2.0 web portal and mobile app.

AirSewa 2.0

- A need was felt for development of an upgraded version of AirSewa to provide a superior user experience with enhanced functionalities.
- Major improvements include features such as secure sign-up and log-in with social media, chatbot for travellers support, improved grievance management including social media grievances, real-time flight status and details flight schedule.
- The upgrade and improved version of AirSewa operates through an interactive web portal as well as through a mobile app for both android and iOS platforms.

Features of the Portal

- It will offer passengers a convenient and hassle-free air travel experience.
- The web portal and application will help to capture air travellers’ feedback for policy interventions.
- The focus is on improving the quality of services so that passengers who are travelling have a safe and comfortable experience.

Addressing Passenger’s Grievances

- Air passengers face issues like flight delays, problem in refunds, long queues, inadequate facilities at airports and complaints of lost baggage.
- The Ministry launched AirSewa web portal and mobile app in November 2016 to address this need.
- The AirSewa 1.0 was received well, with around 30,000 app downloads and around 75,000 web portal hits since its launch.
- It has helped significant number of air passengers to get their concerns resolved with 92 % closure rate for grievance solutions.
- In addition to grievance redressal, AirSewa also provides real-time flight status and flight schedules.

19. INDIA SKILLS REPORT 2019

Why in news?
Andhra Pradesh has topped the list of states with the highest employability followed by Rajasthan and Haryana, as per the India Skills Report 2019.

Key points

- It is a joint initiative of Wheebox, a Global Talent Assessment Company, PeopleStrong, a leading HR Tech Company and Confederation of Indian Industry (CII), and supported and backed by renowned partners like United Nations Development Programme (UNDP), All India Council for Technical Education (AICTE) and Association of Indian Universities (AIU).
Andhra Pradesh has topped the list of states with the highest employability in India.
India skills report also stated that Andhra Pradesh is one of the preferred hiring destination and one of the most preferred state of work by both Male and female workforces.

20. PAiSA Portal

Why in news?
The centralised electronic platform titled PAiSA or Portal for Affordable Credit and Interest Subvention Access was launched at a workshop on Municipal Finance and Urban Planning organised by the ministry in the Capital.

Highlights
- PAiSA (Portal for Affordable Credit and Interest Subvention Access”) is a centralized electronic platform for processing interest subvention on bank loans to beneficiaries under Deendayal Antyodaya Yojana – National Urban Livelihoods Mission
- The web platform has been designed and developed by Allahabad Bank which is the Nodal bank.
- It helps the government to connect directly with the beneficiaries, ensuring that there is greater transparency and efficiency in the delivery of services.
- All 35 states / UTs & all scheduled commercial banks, RRBs and Cooperative Banks are expected to be on board the PAiSA portal the year-end.
- Direct Bank Transfer of subvention on monthly basis under DAY-NULM will give the necessary financial support to small entrepreneurs in a timely manner”.

21. LOGIX INDIA -2019

Why in news?
Union Minister of Commerce & Industry and Civil Aviation launched the logo and brochure of Logix India 2019 in New Delhi.

Highlights
- Logix India 2019 is scheduled to take place in New Delhi.
- The mega logistics event is being organized by the Federation of Indian Export Organisations (FIEO) as a major initiative to improve logistics cost effectiveness and operational efficiencies for India’s global trade.
- Logix India will enable effective international trade logistics and help provide an efficient and cost-effective flow of goods on which other commercial sectors.
- FIEO will also focus on investment opportunities in infrastructure development, warehouse consolidation, technology integration and IT enablement and skilling of manpower.

Indias position
- India ranked 44 in the World Bank Logistics Performance Index 2018.
- As per the Economic Survey 2017-18, India’s logistics industry which is worth around USD 160 billion is likely to touch USD 215 billion in the next two years.
This sector provides employment to more than 22 million people and is expected to grow at the rate of 10.5 per cent over the next 5 years.

India needs to have more robust trade relations with countries in Africa, Latin America, Central Asia, the Middle East and ASEAN.

High logistics cost reduces the competitiveness of Indian goods both in domestic as well as export market.

**Federation of Indian Export Organisations (FIEO)**
- It is apex and largest trade promotion organisation in India.
- It was jointly established in 1965 by Ministry of Commerce and private trade and industry.
- It is responsible for representing and assisting Indian entrepreneurs and exporters in foreign markets. It is headquartered in New Delhi.

---

**22. GLOBAL WAGE REPORT 2018**

**Why in news?**


**Key points**
- India had the fastest wage growth in South Asia in 2017.
- Globally, the rate of growth in wages in 2017 fell to its lowest level since 2008, but workers in India had the highest average real wage growth in Southern Asia of 5.5% over the period 2008-17.

**Others finding of the Report**
- The mean gender pay gap of 34.5% for India and 34% for Pakistan on the basis of hourly wages were the worst among 73 countries for which data was available.
- Globally, women continue to be paid about 20% less than men.
- The gender gap in wages was lowest in high-income countries and highest in low and middle-income countries.
- Workers in Asia and the Pacific have enjoyed the highest real wage growth among all regions over the period 2006–17 with countries such as China, India, Thailand and Vietnam leading the way.
- Over a longer period, 1999 to 2017, real wages have almost tripled in the emerging and developing countries of the G20, while in advanced G20 countries they have increased by just 9%.
- Globally, growth in wages in real terms (that is, adjusted for price inflation) declined from 2.4% in 2016 to just 1.8% last year, far below the level of 3.4% before the global financial crisis.

**International Labour Organisation (ILO)**
- The International Labour Organization (ILO) was founded in 1919, its Constitution forming part of the Treaty of Versailles. The ILO became the first specialised agency of the UN in 1946.
- The ILO is the only ‘tripartite’ UN agency. It brings together representatives of governments, employers and workers to jointly shape policies and programmes. This unique arrangement gives the ILO an edge in incorporating ‘real world’ knowledge about employment and work.
- It deals with labour issues, particularly international labour standards, social protection, and work opportunities for all. The ILO has 187 member states: 186 of the 193 UN member states plus the Cook Islands are members of the ILO.
- The ILO registers complaints against entities that are violating international rules; however, it does not impose sanctions on governments.
• The ILO accomplishes its work through three main bodies which comprise governments’, employers’ and workers’ representatives:
  ➢ The International labour Conference
  ➢ The Governing body
  ➢ The International Labour Office

23. **INDIA-CHINA AMENDS DOUBLE TAXATION AVOIDANCE TREATY**

**Why in news?**
India and China have amended the bilateral tax treaty which will help prevent tax evasion by allowing the exchange of information, the Finance Ministry said Monday.

**Highlights**
• The Protocol also updates the existing provisions for exchange of information to the latest international standards.
• Further, the Protocol incorporates changes required to implement treaty related minimum standards under the Action reports of Base Erosion and Profit Shifting (BEPS) Project, in which India had participated on an equal footing.

**Double Taxation Avoidance Agreement (DTAA)**
• DTAA is a tax treaty signed between countries (or any two/multiple countries) so that taxpayers do not pay double taxes on their income earned from source country as well as their residence country. So far, India has signed double tax avoidance treaties with more than 80 countries around the world.
• The need for DTAA arises out of imbalance in tax collection on global income of individuals. person aims to do business in foreign country, he may end up paying income taxes in both countries i.e. in the country where income is earned and country where individual holds his citizenship or residence. DTAA helps to taxpayers to do away issues of paying double taxes.
• DTAAs are intended to make a country an attractive investment destination by providing relief on dual taxation.
• DTAAs can become an incentive for even legitimate investors to route investments through low-tax regimes to sidestep taxation.

**General Anti Avoidance Rule (GAAR)**
• General anti-avoidance rule (GAAR) is an anti-tax avoidance Rule of India.
• It is framed by the Department of Revenue under the Ministry of Finance.
• It is made to prevent intentional tax avoidance by manipulating tax laws.
• It empowers the Income Tax dept. to investigate any deal or joint ventures which involves huge capital.
• It prevents tax evaders, from routing investments through tax havens like Mauritius, Luxemburg, Switzerland.

24. **INCLUSIVE WEALTH REPORT 2018**

**Why in news?**
The Inclusive Wealth Report (IWR) is a biennial effort led by the UN Environment to evaluate the capacities and performance of the nations around the world to measure sustainability of economy and wellbeing of their people.

**Highlights**
• A country’s inclusive wealth is the social value (not dollar price) of all its capital assets, including natural capital, human capital and produced capital.
• The existing statistical systems in the countries are using System of Environment and Economic Accounts which are geared to measure flow-income.
• The flow would critically depend upon the health and resilience of capital assets like manufactured capital, human capital and natural capital.
• It has come up with alternative shadow prices of human capital (education and health), based on a non-parametric methodology called frontier analysis.
• The IWR 2018 builds on previous versions of the report (IWR2012 and IWR 2014) and advances methods of measuring the base of economy-capital of all types. It covers the period from 1990 to 2014, which is 25 years, which provides us with a picture of the changes in capital assets over almost a generation.

**The results of the IWR 2018 covering 140 countries indicate that:**
• The Inclusive wealth (IW) in 135 countries was higher in 2014 compared to the level in 1990 and the global growth rate of IW was 44% over the indicated period, which implies an average growth rate of 1.8% per year.
• However, during the same period, the global GDP growth per year was 3.4%, which is close to twofold of the annual growth rate of growth in IW.
• In terms of Inclusive wealth per capital and Inclusive wealth per capita adjusted, 89 and 96 of the 140 countries saw increases over the study period compared to their levels in 1990.
• The Inclusive Wealth Report 2018 demonstrates that assessing and valuing natural capital and the change in per capita inclusive/comprehensive wealth over time has the potential to keep track of progress on most Sustainable Development Goals (SDGs).
1. PALAU, REEF CONSERVATION

**Why in news?**
The Western Pacific nation of Palau has become the first country to ban many kinds of sunscreen, in a move to protect its coral reefs from chemicals that scientists say cause significant damage. Under the ban “reef-toxic” sunscreen is defined as containing one of 10 prohibited chemicals, a list that could grow later can be confiscated from tourists when they enter the country.

**List of Reef Toxic Chemicals**
- oxybenzone (benzophenone-3)
- octinoxate (octyl methoxycinnamate)
- octocrylene
- 4-methyl-benzylidene camphor
- triclosan
- methyl paraben
- ethyl paraben
- butyl paraben
- benzyl paraben
- phenoxyethanol

**How these chemicals trigger Coral Bleaching?**
Damage to coral reefs worldwide from climate change has been widely reported. But scientists say there is growing evidence that chemicals from sunscreen, which washes off swimmers or enters the ocean through sewer systems causes grave harm. Even a low concentration of sunscreen in the water can hinder the development of young coral. It causes localized coral bleaching and can disrupt the reproduction of fish by interfering with their hormonal systems.

2. RECOVERING OZONE LAYER

**Why in news?**
Evidence has shown that the ozone layer in parts of the stratosphere has recovered at a rate of 1-3 percent per decade since 2000, a/c to UNEP and WMO.

**Success of Montreal Protocol**
- The four-yearly review of the Montreal Protocol, a 1987 ban on man-made gases that damage the fragile high-altitude ozone layer was held.
- It found that long-term decreases in the atmospheric abundance of controlled ozone-depleting substances and the ongoing recovery of stratospheric ozone.
- The Antarctic ozone hole is recovering, while continuing to occur every year.
- As a result of the Montreal Protocol much more severe ozone depletion in the polar regions has been avoided.
- The Antarctic ozone hole was expected to gradually close, returning to 1980 levels in the 2060s, the report said.

**Montreal Protocol**
- It seeks to cut the production and consumption of ozone depleting substances (ODS) in order to protect the earth’s fragile ozone layer.
• It also aims at phase out HCFCs by 2030. It came into force in 1989 and has been ratified by 197 parties making it universally ratified protocol in UN history.
• It is also highly successful international arrangement, as it has phased-out more than 95% of the ODS so far as per its main mandate in less than 30 years of its existence.
• Under the Montreal Protocol, the accelerated phase out of Hydro chlorofluorocarbons (HCFCs) is underway with a aim to complete phase out by 2030 of these chemicals that result in ozone depletion and aid global warming.

Kigali Amendment

• The Kigali Amendment amends the 1987 Montreal Protocol that was designed to close growing ozone hole in by banning ozone-depleting coolants like chlorofluorocarbons (CFCs).
• Thus, amended Montreal Protocol which was initially conceived only to plug gases that were destroying the ozone layer now includes HFCs responsible for global warming.
• This move will help to prevent a potential 0.5 degree Celsius rise in global temperature by the end of the century.
• The Kigali Agreement or amended Montreal Protocol for HFCs reduction will be binding on countries from 2019.
• It also has provisions for penalties for non-compliance.
• Under it, developed countries will also provide enhanced funding support estimated at billions of dollars globally.

3. POINT CALIMERE WLS

Why in news?
Point Calimere Wildlife Sanctuary in Vedaranyam Range has been closed for a week in view of water-logging caused by a heavy spell of rainfall.
• The water quality at the Point Calimere Wildlife Sanctuary might be unsafe for avifauna to feed and breed, notes a study that examined different pollution indicators in water.
• Researchers compared their results with the Central Pollution Control Board (CPCB) and the United States Environmental Protection Agency (USEPA) standards to reach this conclusion.

Point Calimere WLBS
• The wildlife and bird sanctuary located in Nagapattinam district of Tamil Nadu spreads across an area of 30 sq.km and comprises sandy coastal, saline swamps and thorn scrub forests around the backwater.
• Though it is a protected area and a Ramsar site, chemical companies and small-scale shrimp farms around the wetland have started to pose a threat to the biodiversity and ecosystem of the sanctuary.
• It harbors the single-largest stretch of the unique dry-evergreen forest in the country besides open grasslands and tidal mudflats is of interest to tourists.
• It marks the presence of 364 flowering plants including 198 medicinal plants.
• Point Calimere is the spot inside the Calimere WLS where the coast takes a 90 degree turn from the Bay of Bengal towards Palk Strait.
• The sanctuary and the surrounding wetlands are important wintering grounds for water birds from the North.
• Around 100 species of birds including the Greater Flamingo, Painted Stork, Little Sting, Sea Gull and Brown-headed gull have been making their presence felt since September.
• Blackbuck (Antilope Cervicapra) is the flagship species of the sanctuary.
• Other important animals are the spotted deer, black-napped hare, wild boar, Indian jackal, feral horses, palm civet, short-nosed fruit bat, jungle cat and monitor lizard.
4. HIMALAYAN STATE REGIONAL COUNCIL

Why in news?
NITI Aayog has constituted the ‘Himalayan State Regional Council’ to ensure sustainable
development of the Indian Himalayan region.

- Recognizing the uniqueness of the Himalayas and the challenges for sustainable
development, Five Working Groups were constituted by NITI Aayog on June 2, 2017.
- The Council has been constituted to review and implement identified action points based
on the Reports of five Working Groups, which were established along thematic areas to
prepare a roadmap for action.
- These Working Groups were tasked with preparing a roadmap for action across five thematic
areas namely:
  - Inventory and Revival of Springs in Himalayas for Water Security,
  - Sustainable Tourism in Indian Himalayan Region,
  - Shifting Cultivation: Towards Transformation Approach,
  - Strengthening Skill & Entrepreneurship (E&S) Landscape in Himalayas, and
  - Data/Information for Informed Decision Making
- The five thematic reports were released by the NITI Aayog in August, 2018 and framed the
action points for the Terms of Reference of the Council constituted.
- The HSRC will be the nodal agency for the Sustainable development in the Himalayan Region
which consists of the twelve States and some selected districts (includes West Bengal and
Assam as well).

Terms of Reference

- The Council shall monitor the implementation of action points for Central Ministries,
Institutions and 12 Himalayan State Governments in Indian Himalayan Region.

The action points include:

- river basin development and regional cooperation,
- spring mapping and revival across Himalayas in phased manner for water security;
- develop, implement and monitor tourism sector standards as well as bring policy coherence,
- strengthen skill & entrepreneurship with focus on identified priority sectors.

5. ELEPHANT CORRIDORS IN INDIA / LEGAL PROTECTION OF ELEPHANT CORRIDORS AND THEIR
HABITATS

Why in news?
The NGT has asked the MoEFCC to consider declaring all elephant corridors in the country as eco-
sensitive zones.

Background

- The observations came while the green panel was hearing a plea that highlighted the
increasing number of unnatural elephant deaths taking place across many states.
- Issue of elephant corridors has been raised by different applicants and various judgments
have also been passed by the Tribunal.
- Therefore, NGT directed MoEFCC to look into this aspect in a broader perspective and also
to have a permanent solution.

Designating a Eco-sensitive Zone

- The Environment Protection Act, 1986 does not mention the word “Eco-sensitive Zones”.

The section 3(2)(v) of the Act, says that Central Government can restrict areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards.

Besides the section 5 (1) of this act says that central government can prohibit or restrict the location of industries and carrying on certain operations or processes on the basis of considerations.

These include the biological diversity of an area, maximum allowable limits of concentration of pollutants for an area, environmentally compatible land use, and proximity to protected areas.

The above two clauses have been effectively used by the government to declare Eco-Sensitive Zones or Ecologically Fragile Areas (EFA).

The same criteria have been used by the government to declare No Development Zones.

**Why such guideline?**

- The complete lack of legal protection to elephant corridors and elephant reserves has led to a large number of deaths in areas beyond the protected areas.
- Owing to the increased denudation and loss of their forest habitats, elephants have come increasingly into conflicts with humans.
- Hence they face deliberate retaliatory killings and accidents at railway crossings, high tension power lines, power fences and trenches.

**6. BASIC COUNTRIES**

**Why in news?**
The 27th BASIC (Brazil, South Africa, India and China) Ministerial Meeting on Climate Change in was held in New Delhi.

**Reminder for Developed Countries NDCs**

- Ahead of the United Nations Conference of Parties (COP) in December, Environment Ministers and top climate change negotiators from Brazil, South Africa, India and China (BASIC) convened in Delhi.
- The countries as a group would continue to push for developed countries on their earlier commitment to providing $100 billion annually from 2020.
- So far only a fraction of these monies have actually been provided.

**BASIC countries**

- The BASIC countries are a bloc of four large newly industrialized countries — Brazil, South Africa, India and China — formed by an agreement on 28 November 2009.
- The four committed to act jointly at the Copenhagen climate summit, including a possible united walk-out if their common minimum position was not met by the developed nations.
- This emerging geopolitical alliance, initiated and led by China, then brokered the final Copenhagen Accord with the United States.
- The grouping is working to define a common position on emission reductions and climate aid money, and to try to convince other countries to sign up to the Copenhagen Accord.
- However, in January 2010, the grouping described the Accord as merely a political agreement and not legally binding, as is argued by the US and Europe.
- The four countries also said they will announce their plans to cut greenhouse gas emissions by 31 January 2010 as agreed in Copenhagen.
- This move was apparently intended to share richer nations into increasing their funding for climate mitigation in poorer nations.
7. ACROSS SCHEME

Why in news?
The Cabinet Committee has approved continuation of the nine sub-schemes of the umbrella scheme “Atmosphere & Climate Research-Modelling Observing Systems & Services (ACROSS)” during 2017-2020.

Background:
- The Ministry of Earth Sciences has a mandate to carry out research and development activities to develop and improve capability to forecast weather, climate and natural hazard related phenomena.
- Towards this direction, MoES has taken several initiatives to formulate specific schemes like weather and climate modelling, monsoon-research, climate change science & climate services etc.
- These schemes involve multi-institutes wherein each unit has a designated role for accomplishing the aforesaid tasks.
- As a result, all these schemes with specific objectives and budget are implemented in an integrated manner and are put together under the umbrella scheme “ACROSS”.

ACROSS Scheme
- ACROSS scheme pertains to the atmospheric science programs of the Ministry of Earth Sciences (MoES).
- It addresses different aspects of weather and climate services, which includes warnings for cyclone, storm surges, heat waves, thunderstorms etc.
- Each of these aspects is incorporated as nine sub-schemes under the umbrella scheme “ACROSS” and is implemented in an integrated.
- The ACROSS scheme consists of nine sub-programmes which are multi disciplinary and multi institutional in nature and will be implemented in an integrated manner.
- As the objective of the ACROSS scheme is to provide a reliable weather and climate forecast for betterment of society, the scheme will aim at improving skill of weather and climate forecast through sustained observations, intensive R & D.

Benefits of the Scheme
- The scheme will provide improved weather, climate and ocean forecast and services, thereby ensuring transfer of commensurate benefits to the various services.
- A sizable number of scientific and technical staff along with requisite administrative support, thereby generating employment.
- To ensure last-mile connectivity of the weather based services to the end-user, a large number of agencies like the Krishi Vigyana Kendras of ICAR, Universities and local municipalities are roped in thus generating employment opportunities to many people.

8. WILDLIFE CRIME DATABASE MANAGEMENT SYSTEM

Why in news?
UN Environment has awarded Wildlife Crime Control Bureau (WCCB), Ministry of Environment with Asia Environment Enforcement Awards, 2018 for excellent work done in combating transboundary environmental crime.

About the Award
- The Asia Environment Enforcement Awards publicly recognize and celebrate excellence in enforcement by government officials and institutions/teams combating transboundary environmental crime in Asia.
The awards are given to outstanding individuals and/or government organizations/teams that demonstrate excellence and leadership in enforcement of national laws to combat transboundary environmental crime.
The award was decided upon by a selection panel set up by the UN Environment and this is the second time in a row the awards are being given by UN Environment to India.

Wildlife Crime Database Management System
- WCCB has adopted innovative enforcement techniques that have dramatically increased enforcement of transboundary environmental crimes in India.
- It has developed an online Wildlife Crime Database Management System to get real time data in order to help analyze trends in crime and devise effective measures to prevent and detect wildlife crimes across India.
- This system has been successfully used to analyse trends, helping put in preventive measures as well as for successfully carrying out operations such as Operation SAVE KURMA, THUNDERBIRD, WILDNET, LESKNOW, BIRBIL, THUNDERSTORM, LESKNOW-
- It has also helped enforcement agencies in the arrest of 350 wildlife criminals and huge seizures of animal body parts and skins.
- In order to involve the public in the fight against wildlife crime, WCCB has also developed a scheme to enroll willing persons as WCCB Volunteers.

Wildlife Crime Control Bureau
- Wildlife Crime Control Bureau is a statutory multi-disciplinary body established by the Government of India under the MoEFCC, to combat organized wildlife crime in the country.
- The Bureau has its headquarter in New Delhi and five regional offices at Delhi, Kolkata, Mumbai, Chennai and Jabalpur; three sub-regional offices at Guwahati, Amritsar and Cochin; and five border units at Ramanathapuram, Gorakhpur, Motihari, Nathula and Moreh.
- Under Section 38 (Z) of the Wild Life (Protection) Act, 1972, it is mandated:
  - to collect and collate intelligence related to organized wildlife crime activities and
  - to disseminate the same to State and other enforcement agencies for immediate action so as to apprehend the criminals;
  - to establish a centralized wildlife crime data bank;
  - co-ordinate actions by various agencies in connection with the enforcement of the provisions of the Act;
  - assist foreign authorities and international organization concerned to facilitate co-ordination and universal action for wildlife crime control;
  - capacity building of the wildlife crime enforcement agencies for scientific and professional investigation into wildlife crimes and assist State Governments to ensure success in prosecutions related to wildlife crimes; and
  - advise the Government of India on issues relating to wildlife crimes having national and international ramifications, relevant policy and laws.
- It also assists and advises the Customs authorities in inspection of the consignments of flora & fauna as per the provisions of Wild Life Protection Act, CITES and EXIM Policy governing such an item.

9. STRATOSPHERIC AEROSOL INJECTION (SAI)

Why in news?
Spraying sun-dimming chemicals high above the earth to slow global warming could be remarkably inexpensive costing about $2.25 billion a year over a 15-year period, according to a study by U.S. scientists.
Some researchers say the geo-engineering technique known as stratospheric aerosol injection (SAI) could limit rising temperatures that are causing climate change.

**What are Stratospheric Sulphur Aerosols?**
- Stratospheric sulfur aerosols are sulfur-rich particles which exist in the stratosphere region of the Earth’s atmosphere.
- The layer of the atmosphere in which they exist is known as the Junge layer, or simply the stratospheric aerosol layer.
- These particles consist of a mixture of sulfuric acid and water.
- They are created naturally, such as by photochemical decomposition of sulfur-containing gases, e.g. carbonyl sulfide.
- Sulfur aerosols are common in the troposphere as a result of pollution with sulfur dioxide from burning coal, and from natural processes.
- Volcanoes are a major source of particles in the stratosphere as the force of the volcanic eruption propels sulfur-containing gases into the stratosphere.

**Stratospheric Aerosol Injection (SAI)**
- Under SAI delivery of precursor sulfide gases such as sulfuric acid, hydrogen sulfide (H2S) or sulfur dioxide (SO2) by artillery, aircraft and balloons has under study.
- This proposed method could counter most climatic changes, take effect rapidly, have very low direct implementation costs, and be reversible in its direct climatic effects.
- It would involve the use of huge hoses, cannons or specially designed aircraft to spray large quantities of sulphate particles into the upper layer of the atmosphere to act as a reflective barrier against sunlight.
- Total costs estimated to launch a hypothetical SAI effort 15 years from now would be $3.5 billion and average annual operating costs would be about $2.25 billion a year over 15 years.
- Discounting other methods of deployment because of cost and feasibility, the research assumes a special aircraft can be designed to fly at an altitude of about 20 km and carry a load of 25 tonnes.

**Benefits of the SAI**
- Mimics a natural process
- Technological feasibility
- Economic and feasible Cost
- Efficiency

**Possible side effects**
- Tropospheric Ozone depletion
- Whitening of the sky
- Tropopause warming and the humidification of the stratosphere
- Health effects
- Stratospheric temperature and circulation change

**10. DUDHWA TIGER RESERVE**

*Why in news?*
Dudhwa Tiger Reserve and Sashastra Seema Bal have joined hands to provide security to Dudhwa forests and its rich wildlife.
• A consensus was reached among all security agencies including SSB on the border and the Dudhwa field staff to strengthen the patrolling in and around Dudhwa to check forest and wildlife crimes.
• It is aimed for intelligence and information sharing among various security agencies about activities of wildlife and forest criminals.

About Dudhwa Tiger Reserve
• The Dudhwa Tiger Reserve is a protected area in Uttar Pradesh that stretches mainly across the Lakhimpur Kheri and Bahraich districts.
• It comprises the Dudhwa National Park, Kishanpur Wildlife Sanctuary and Katarniaghat Wildlife Sanctuary.
• It covers an area of 1,284.3 sq.km and includes three large forest fragments amidst the matrix dominated by agriculture.
• It shares the north-eastern boundary with Nepal, which is defined to a large extent by the Mohana River.
• The area is a vast alluvial floodplain traversed by numerous rivers and streams flowing in south-easterly direction.
• In 1987, the Dudhwa National Park and the Kishanpur Wildlife Sanctuary were brought under the purview of the ‘Project Tiger’ as Dudhwa Tiger Reserve.

11. INDIAN OWL FESTIVAL

Why in news?
The Indian Owl Festival, the country’s first owl fest, will be held at Pingori village in Purandar taluka of Pune, Maharashtra.
• The two-day festival is organised by Ela Foundation, an NGO working towards nature education and conservation.
• It will give information on owl conservation and feature art forms like pictures, paintings, lanterns, lamp shades, posters, origami, stitched articles, poems and stories on owls.
• It is a first-of-its-kind festival in the country that is being organised with the intention of creating awareness about owl as a bird and debunking numerous superstitions associated with it.

Why Conserve Owls?
• Of the 262 species of owls that are found in the world, 75 feature in the red data book — meaning they are threatened.
• Major causes behind this are superstitions and habitat loss, both are man-made.
• Owls eat rats, rodents, bandicoots, and mice. Most of the species that owls consume are harmful to agricultural croplands. So these birds are actually very beneficial to farmers.

Owls in India
• According to a report published by Traffic India, a wildlife trade monitoring body, and the World Wildlife Fund (WWF) in 2010, owls were found to be consumed and traded for a wide variety of purposes, including black magic, street performances, taxidermy, private aviaries/zoos, food and in folk medicines.
• Despite being protected under the Wildlife (Protection) Act of India, the report has found owls to be highly prized and in demand for black magic purposes.
1. RAILWAYS ROLLS OUT ALL-INDIA UNRESERVED MOBILE TICKETING FACILITY (UTS ON MOBILE)

Why in news?
Ministry of Railways has introduced Unreserved Mobile Ticketing with a view to promote three C’s—Cashless transactions, Contact less ticketing and Customer convenience and experience.

UTS on Mobile
- Booking of unreserved tickets on all non-suburban sections across all Zonal Railways has been made available from November, 1st.
- It enables seamless booking of unreserved tickets all over Indian Railways which will obviate the need for passengers to wait in queues for purchasing the tickets.
- The facility of booking unreserved tickets, including season tickets and also platform tickets is available through the ‘UTSONMOBILE’ app available for Android, IOS and Windows phones.

Details of the app
- ‘UTSONMOBILE’ application is available for Android, IOS, Windows phones and can be downloaded from Google play or window store.
- It is developed by Indian Railway- CRIS.

Features
- The process of ticket booking involves downloading the application and registration by furnishing the requisite details.
- After successful registration, the user is given credentials to book ticket through this application within the ticketing area and outside the Geo-fenced area.
- Geo-fenced area is station premises and train route within which ticket cannot be booked.
- The facility of making payment through all types of digital modes i.e. debit card, credit card, net-banking, UPI and other e-wallets has been introduced.

Benefits
- Mobile Ticketing shall promote 3C’s- Cashless transactions, Contact less ticketing and Customer convenience.
- Seamless booking of unreserved tickets all over Indian Railways.
- Obviate the need for passengers to wait in queues for purchasing the tickets and enhance the experience for booking unreserved tickets – journey, season tickets, platform tickets.
- Environment friendly.

2. INDIA CONDUCTS SUCCESSFUL NIGHT TRIAL OF NUCLEAR-CAPABLE AGNI-I MISSILE

Why in news?
India has successfully conducted the night trial of the indigenously developed nuclear capable Agni-I ballistic missile off the Odisha coast.

The surface-to-surface missile test was test-fired as part of a user-trial from the Abdul Kalam Island off Odisha coast.
Details of the Trial

- The night trial of the ballistic missile with a strike range of 700 km was first conducted in April 2014.
- The trajectory of the trial was tracked by a battery of sophisticated radars, telemetry observation stations, electro-optic instruments and naval ships from its launch till the missile hit the target area with accuracy.
- Agni-I missile has a specialised navigation system which ensures it reaches the target with a high degree of accuracy and precision.

About Agni –I

- Agni-I is a short-range ballistic missile developed by DRDO of India under the Integrated Guided Missile Development Program.
- It is sleek single-stage missile, powered by solid propellants developed after the Kargil War to fill the gap between 250 km range of Prithvi-II and 2,500 km range of Agni-II.
- It was first launched on 25 January 2002 from a road mobile launcher at Integrated Test Range (ITR), Wheeler Island.
- Agni-I was developed by advanced systems laboratory, the premier missile development laboratory of the DRDO.
- Weighing 12 tonnes, the 15-metre-long Agni-I, which can carry payloads up to 1000 kg, has already been inducted into the Indian Army.

3. INDIAN NAVY’S DEEP SUBMERGENCE RESCUE VESSEL (DSRV) CAPABILITY

Why in news?
The Indian Navy has inducted a Submarine Rescue System with a Deep Submergence Rescue Vessel (DSRV) along with associated equipment.

Deep Submergence Rescue Vessel (DSRV)

- The Indian DSRV has the capability to rescue personnel from a distressed submarine (DISSUB) up to a depth of 650 m and it is the latest in terms of technology and capabilities.
- It has been designed and supplied to meet unique requirements of our submarines by M/s James Fishes Defence, UK.
- This System has a Side Scan Sonar for locating the position of the submarine in distress at sea.
- It will be providing immediate relief by way of posting Emergency Life Support Containers with the help of Remotely Operated Vehicle (ROV) for the rescue.
- To ensure early mobilization, the System permits rapid transportation of the Rescue System from the base to the exact location of the distressed submarine by transportation using air/land/sea vessels.
4. **DAWN MISSION / NASA**

**Why in news?**
NASA’s pioneering Dawn spacecraft which orbited the two largest objects in the asteroid belt has run out of fuel, ending a historic 11-year mission it had unraveled many mysteries of our solar system.

**Dawn Mission**
- The Dawn mission was launched in 2007 to study the protoplanet Vesta and the dwarf planet Ceres.
- It missed scheduled communications sessions with NASA’s Deep Space Network.
- Mission managers concluded that the spacecraft finally ran out of hydrazine, the fuel that enables the spacecraft to control its pointing.
- The astounding images and data that Dawn collected from Vesta and Ceres are critical to understanding the history and evolution of our solar system.
- Dawn can no longer keep its antennae trained on Earth to communicate with mission control or turn its solar panels to the Sun to recharge, according to the US space agency.

**Records set by the mission**
- In 2011, when Dawn arrived at Vesta, the second largest world in the main asteroid belt, the spacecraft became the first to orbit a body in the region between Mars and Jupiter.
- In 2015, when Dawn went into orbit around Ceres, a dwarf planet that is also the largest world in the asteroid belt, the mission became the first to visit a dwarf planet and go into orbit around two destinations beyond Earth, it said.
- Dawn also reinforced the idea that dwarf planets could have hosted oceans over a significant part of their history and potentially still do.
- Dawn will remain in orbit for at least 20 years, and engineers have more than 99% confidence the orbit will last for at least 50 years.

5. **ASTROSAT NASA-ISRO COLLABORATION**

**Why in news?**
India’s AstroSat helps in finding blackhole, Scientists using data from India’s first dedicated astronomy satellite, AstroSat, and NASA’s Chandra X-ray Observatory have found that a black hole in the binary star system 4U 1630-47 spins close to the maximum possible rate.

**AstroSat-Chandra study**
- This first cooperation of India and US using AstroSat and Chandra satellites regarding black hole studies should open up ways for future such collaborations.
- The SXT and the Large Area X-ray Proportional Counter (LAXPC) aboard the first dedicated Indian astronomy satellite AstroSat played a key role to measure the black hole spin rate, which was consistent with results from our contemporaneous Chandra satellite data.
- AstroSat was launched in 2015 by the Indian Space Research Organisation (ISRO). It is the first dedicated astronomy satellite of India, and the SXT aboard AstroSat is the first Indian X-ray telescope.
- Apart from Japan, India is the first Asian country to build an X-ray Telescope (for example, China could not build such a telescope till now).

**More about AstroSat**
- Astrosat is India’s first dedicated multi-wavelength space observatory launched on a PSLV-XL on 28 September 2015.
It is a multi-wavelength astronomy mission on an IRS-class satellite into a near-Earth, equatorial orbit.

On board ASTROSAT are five astronomy payloads for simultaneous multi-band observations. The assembly is placed on a rotating platform to scan the available sky once every six hours in order to locate transient X-ray sources. They are:

- Twin 38-cm Ultraviolet Imaging Telescopes (UVIT) covering Far-UV to optical bands.
- Large Area Xenon Proportional Counters (LAXPC) covering medium energy X-rays.
- Soft X-ray Telescope (SXT) with conical foil mirrors and X-ray CCD detector
- A Cadmium-Zinc-Telluride coded-mask imager (CZTI)
- A Scanning Sky Monitor (SSM) consisting of three one-dimensional position-sensitive proportional counters with coded masks.

6. NASA’S KEPLER SPACE TELESCOPE

Why in news?
NASA’s Kepler space telescope, which has been retired after running out of fuel, is being widely described as the most prolific planet-hunting machine in history.

Kepler Mission
- Kepler is a space observatory launched by NASA to discover Earth-size planets orbiting other stars and was launched on March 7, 2009.
- Named after astronomer Johannes Kepler. It was launched into an Earth-trailing heliocentric orbit
- Kepler is part of NASA’s Discovery Program of relatively low-cost, focused primary science missions
- The scientific objective of Kepler is to explore the structure and diversity of planetary systems
- This spacecraft aims:
  - To determine how many Earth-size and larger planets there are in or near the habitable zone (often called “Goldilocks planets”)
  - To determine the range of size and shape of the orbits of these planets
  - To estimate how many planets there are in multiple-star systems
  - To determine the range of orbit size, brightness, size, mass and density of short-period giant planets
  - To identify additional members of each discovered planetary system using other techniques
  - Determine the properties of those stars that harbor planetary systems.

7. INDIA ANNOUNCES COMPLETE NUCLEAR DETERRENCE

Why in news?
India has declared that its nuclear triad, stated in its nuclear doctrine, is operational. This was after indigenous ballistic missile nuclear submarine INS Arihant achieved a milestone by conducting its first deterrence patrol. It essentially means that Arihant is now prowling the deep seas carrying ballistic missiles equipped with nuclear warheads. The second submarine in the series, Arighat is now undergoing sea trials after which it will be inducted into service.

Development of INS Arihant
- INS Arihant, a strategic asset, was developed for over two decades under the Advanced Technology Vessel (ATV) programme
INS Arihant is India’s first indigenously-designed, developed and manufactured nuclear-powered ballistic missile submarine, and three more such submarines are reportedly under various stages of construction.

INS Arihant development project was officially acknowledged in 1998 and the submarine was launched in 2009.

The nuclear reactor of the submarine went critical in 2013 and it was commissioned three years later.

Reliability of INS Arihant

- It comes directly under the Nuclear Command Authority headed by the Prime Minister.
- Given India’s stated position of ‘No-First-Use’ (NFU) in launching nuclear weapons, the SSBN is the most dependable platform for a second-strike.
- Because they are powered by nuclear reactors, these submarines can stay underwater indefinitely without the adversary detecting it. The other two platforms — land-based and air-launched are far easier to detect.
- This places India in the league of the few countries that can design, construct and operate SSBN.

About NFU policy

In 1998, India conducted nuclear tests under Pokhran-II and in 2003, it declared its nuclear doctrine based on credible minimum deterrence and an NFU policy while reserving the right of massive retaliation if struck with nuclear weapons first.

8. GUIDELINES FOR OPERATION GREENS

Why in news?
Ministry of Food Processing Industries (MoFPI) has approved the operationalisation strategy for Operation Greens. Operation Greens was announced in the Budget speech of 2018-19 with an outlay of Rs 500 crores to stabilize the supply of Tomato, Onion and Potato (TOP) crops and to ensure availability of TOP crops throughout the country round the year without price volatility.

The strategy
The strategy will comprise of a series of measures which include:

(I) Short-term Price Stabilisation Measures

NAFED will be the Nodal Agency to implement price stabilisation measures. MoFPI will provide 50% of the subsidy on the following two components:

Transportation of Tomato Onion Potato (TOP) Crops from production to storage;

Hiring of appropriate storage facilities for TOP Crops;

(II) Long-Term Integrated value chain development projects

- Capacity Building of FPOs & their consortium
- Quality production
- Post-harvest processing facilities
- Agri-Logistics
- Marketing / Consumption Points
- Creation and Management of e-platform for demand and supply management of TOP Crops.
Objectives of Operation Greens

- Enhancing value realisation of TOP farmers by targeted interventions to strengthen TOP production clusters and their FPOs, and linking/connecting them with the market.
- Price stabilisation for producers and consumers by proper production planning in the TOP clusters and introduction of dual-use varieties.
- Reduction in post-harvest losses by the creation of farm gate infrastructure, development of suitable agro-logistics, the creation of appropriate storage capacity linking consumption centres.
- Increase in food processing capacities and value addition in the TOP value chain with firm linkages with production clusters.
- Setting up of a market intelligence network to collect and collate real-time data on demand and supply and price of TOP crops.

9. TIANGONG / INTERNATIONAL SPACE STATION

Why in news?
China unveiled a replica of its first permanently crewed space station. It would replace the ISS, international community’s orbiting laboratory.

Tiangong- The Heavenly Palace
- The unveiled model is a 17-metre (55-foot) core module.
- It represented the living and working space of the Tiangong or “Heavenly Palace” which will also have two other modules for scientific experiments and will be equipped with solar panels.
- Three astronauts will be permanently stationed in the 60-tonne orbiting lab, which will enable the crew to conduct biological and microgravity research.
- Assembly is expected to be completed around 2022 and the station would have a lifespan of around 10 years.
- China will then have the only space station in orbit, though it will be much smaller than the ISS which weighs 400 tonnes and is as large as a football pitch.

International Space Station
- The International Space Station (ISS) is a space station, or a habitable artificial satellite, in low Earth orbit.
- It is collaboration between the United States, Russia, Canada, Europe and Japan.
- The ISS is the largest human-made body in low Earth orbit and can often be seen with the naked eye from Earth.
- The ISS serves as a microgravity and space environment research laboratory in which crew members conduct experiments in biology, human biology, physics, astronomy, meteorology, and other fields.
- The station is suited for the testing of spacecraft systems and equipment required for missions to the Moon and Mars.
- Its first component launched into orbit in 1998, and the last pressurized module was fitted in 2011 and is expected to operate until at least 2028.
- It consists of pressurized modules, external trusses, solar arrays.
ARTIFICIAL NEURON NETWORK, SPINNAKER

Why in news?
The world’s largest supercomputer designed to work in the same way as the human brain has been switched on for the first time.

Neurons
- A neuron or a nerve cell is an electrically excitable cell that receives, processes, and transmits information through electrical and chemical signals.
- Neurons are the primary components of the central nervous system, which includes the brain and spinal cord.
- To give an idea of scale, a mouse brain consists of around 100 million neurons and the human brain is 1,000 times bigger than that.

What is Artificial Neuron Network?
- An artificial neuron is a mathematical function conceived as a model of biological neurons, a neural network.
- Artificial neural networks are computing systems vaguely inspired by the biological neural networks that constitute animal brains.
- The network is based on a collection of connected units or nodes called artificial neurons, which loosely model the neurons in a biological brain.
- The neural network itself is not an algorithm, but rather a framework for many different machine learning algorithms to work together and process complex data inputs.
- Such systems “learn” to perform tasks by considering examples, generally without being programmed with any task-specific rules.
- For example, in image recognition, they might learn to identify images that contain cats by analyzing example images that have been manually labeled as “cat” or “no cat”.

Spiking Neural Network Architecture (SpiNNaker)
- The SpiNNaker machine, designed and built in The University of Manchester in the UK, can model more biological neurons in real time than any other machine on the planet.
- The newly formed million-processor-core SpiNNaker machine is capable of completing more than 200 million actions per second, with each of its chips having 100 million transistors.
- Biological neurons are basic brain cells present in the nervous system that communicate primarily by emitting ‘spikes’ of pure electro-chemical energy.
- Neuromorphic computing uses large scale computer systems containing electronic circuits to mimic these spikes in a machine.

Features of SpiNNaker
- SpiNNaker completely re-thinks the way conventional computers work.
- SpiNNaker is unique because, unlike traditional computers, it does not communicate by sending large amounts of information from point A to B via a standard network.
- Instead it mimics the massively parallel communication architecture of the brain, sending billions of small amounts of information simultaneously to thousands of different destinations.
- Researchers eventually aim to model up to a billion biological neurons in real time and are now a step closer.
Utility of SpiNNaker
- One of the fundamental uses for the supercomputer is to help neuroscientists better understand how our own brain works.
- It does this by running extremely large scale real-time simulations which simply aren’t possible on other machines.
- For example, SpiNNaker has been used to simulate high-level real-time processing in a range of isolated brain networks.
- This includes an 80,000 neuron model of a segment of the cortex, the outer layer of the brain that receives and processes information from the senses.
- It also has simulated a region of the brain called the Basal Ganglia – an area affected in Parkinson’s disease, meaning it has massive potential for neurological breakthroughs in science such as pharmaceutical testing.

Projects under SpiNNaker
- The power of SpiNNaker has even recently been harnessed to control a robot, the SpOmnibot.
- This robot uses the SpiNNaker system to interpret real-time visual information and navigate towards certain objects while ignoring others.
- Neuroscientists can now use SpiNNaker to help unlock some of the secrets of how the human brain works by running unprecedentedly large scale simulations.
- It also works as real-time neural simulator that allows roboticists to design large scale neural networks into mobile robots so they can walk, talk and move with flexibility and low power.

11. GSAT 29, GSLV MK III

Why in news?
Heaviest satellite launched on indigenous rocket
Amid concerns over Cyclone Gaja, the country’s heaviest satellite to be carried on board an indigenous rocket was successfully launched into Geosynchronous Transfer Orbit (GTO).

GSLV MK III
- GSLV Mk III is a three-stage heavy lift launch vehicle developed by the Indian Space Research Organisation (ISRO).
- Two massive boosters with solid propellant constitute the first stage, the core with liquid propellant form the second stage and the cryogenic engine completes the final stage.

About GSAT 29
- GSAT-29 is a multiband, multi-beam communication satellite, intended to serve as test bed for several new and critical technologies.
- Its Ku-band and Ka-band payloads are configured to cater to the communication requirements of users including those from remote areas especially from Jammu & Kashmir and North-Eastern regions of India.
- In addition, the Q/V-Band communication payload onboard is intended to demonstrate the future high throughput satellite system technologies.
- Geo High Resolution Camera will carry out high resolution imaging.
- Optical Communication Payload will demonstrate data transmission at a very high rate through optical communication link.
What's so special with this launch?

- The success of GSLV MkIII-D2 marks an important milestone in Indian space programme towards achieving self-reliance in launching heavier satellites.
- The success of this flight also signifies the completion of the experimental phase of GSLV Mark III.
- With declaring GSLV MKIII operational, Chandrayaan-2 and Gaganyaan missions will be launched by this heavy-lifter.

**THE VEHICLE**

GSLV MkIII-D2 is a three stage launch vehicle with 2 solid strap-ons (S200), a liquid core stage (L110) and a cryogenic upper stage (C25). The strap-on motors are located on either sides of the liquid core stage equipped with two engines. Compared to solid and liquid stages, the C25 cryogenic stage is more efficient as well as complex.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>S200</th>
<th>L110</th>
<th>C25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (m)</td>
<td>26.2</td>
<td>21.3</td>
<td>13.5</td>
</tr>
<tr>
<td>Diameter (m)</td>
<td>3.2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Propellants</td>
<td>Solid (HTPB based)</td>
<td>Liquid (UN25 + N2O4)</td>
<td>Cryogenic (LH2 &amp; LOX)</td>
</tr>
<tr>
<td>Propellant Mass (t)</td>
<td>2 x 205</td>
<td>116</td>
<td>20.6</td>
</tr>
<tr>
<td>Stage Mass at Lift Off (t)</td>
<td>472</td>
<td>125.8</td>
<td>33</td>
</tr>
</tbody>
</table>

12. DECISION SUPPORT SYSTEM (DSS)

**Why in news?**

IIT Kharagpur researchers have devised a decision support system to help maximize the LPG connections in BPL (below poverty line) households. It is a first of its kind for analysis of a national level energy policy, it said.

**Decision Support System (DSS)**

- A DSS is a computer programme that helps in making sound rational decisions using mathematical programming and operation research techniques.
- The DSS devised at the IIT uses mixed integer linear programming to mathematically formulate the policy using input parameters, decision variables and their relationships.
- The mathematical model has found the optimum number of total (BPL) connections required in a region, number of dealerships that need to be commissioned in a region over the policy time frame.
- The research has done sensitivity analysis with the mathematical model — change in a decision variable with respect to the change in parameter.
Benefits of the DSS

- With this, they can predict not only how the number of household connections can be increased but also the critical region that contributes most in each zone of LPG distribution.
- The DSS for such policies can provide the exact values of important parameters over the prescribed policy time period.
- This in turn will help researchers to take important measures to ascertain the proper functioning (monitoring) of the policy towards the desired goal.
- This kind of DSS can be developed for various federal and state level policies for various commodities like solar panels distributions, agricultural commodities and so on.

Findings of the DSS

- The government has recently revised the target to eight crore LPG connections by 2020.
- Certain areas though have been well covered, such as Maharashtra, Tamil Nadu, Bihar, Rajasthan and West Bengal.
- The government needs to pay special attention to regions critical to LPG penetration, such as Assam in the Northeastern zone, in order to achieve 100 per cent BPL household penetration.

13. GROWTH INDIA TELESCOPE, SUPERNOVAE

Why in news?
The 0.7 m GROWTH-India telescope at the Indian Astronomical Observatory located in Hanle, Ladakh, has made its first science observation which is a follow-up study of a nova explosion.

GROWTH-India Telescope

- The GROWTH-India telescope was commissioned six months ago soon after which it saw first light, on the night of June 12.
- It is part of a multi-country collaborative initiative – known as the Global Relay of Observatories Watching Transients Happen (GROWTH) – to observe transient events in the universe.
- The fully robotic telescope is designed to capture cosmic events occurring over relatively shorter periods of the cosmological timescale: years, days and even hours.
- Universities and research institutes from the US, the UK, Japan, India, Germany, Taiwan and Israel are part of the initiative.
- Their primary research objective is time-domain astronomy, which entails the study of explosive transients and variable sources (of light and other radiation) in the universe.

Functioning

- The telescope is potentially fully robotic and can operate on its own, but the way these readings were taken has only partly used its potential for automation.
- The group sitting in IIT Bombay worked through Bengaluru’s IIAP to control the telescope.
- While the IITB-IIAP link was through regular internet connection, the one from IIAP to the telescope in Ladakh was through a satellite link.
- A typical professional telescope has a field of about 0.1 square degrees. This telescope has a field that is five to six times larger.
- It can ‘slew’ or move its focus from one part of the sky to another in just about 10-15 seconds and its camera can view stellar objects that are thousands to millions of light years away.
Threefold goals

- The GROWTH-India telescope is part of the Global Relay of Observatories Watching Transients Happen.

Its goals are threefold:

- Search for explosions in the optical regime whenever LIGO group detects a Binary Neutron Star merger
- Study nearby young supernova explosions
- Study nearby asteroids.

Nova Observation

- The telescope has been taking readings since then, and this is the first ‘follow-up’ work.
- The celestial object was first noticed by a different group which saw the nova explosion.
- Though a small step in astronomy but it is a big leap, because it is the first scientific result obtained by this telescope.

Details of the Nova

- Novae are explosive events involving violent eruptions on the surface of white dwarf stars, leading to temporary increase in brightness of the star.
- Unlike a supernova, the star does not go on to die but returns to its earlier state after the explosion.
- This recurrent nova, named M31N-2008, has been observed to erupt several times, the most recent eruption happening in November 2018.
- Transient phenomena such as supernovae are important parts of time-domain astronomy which is a less-explored frontier in astronomy.
- Such an explosion is when the inner material of the star is thrown out. There is no other way we can actually see what is inside a star.

14. CHANDRAYAAN-2

Why in news?
The Chandrayaan-2 orbiter carrying the lander and a rover is scheduled to be sent to the Moon from Sriharikota on January 31 and expected to reach on lunar surface in February 2019.

For that, last phase testing of various sensors on board are being carried on.

Litmus test for Chandrayaan-2

- The ISRO has planned to fly the sensors on an aircraft over its artificial lunar site at Challakere to see how they will function and guide the Chandrayaan-2 landing craft while descending on the lunar terrain.
- Among the Sensors are those that help the lander to precisely assess its height from the landing spot; decide its speed and help it to steer clear of any boulders or uneven surface.
- For the test, a prototype module carrying the sensors will be flown on one of ISRO’s two small aircraft.
- As the plane descends from around 7 km to about 1 km over the artificial terrain, the sensors must show how they will guide the soft landing of the lunar craft at the right spot, speed and position.
About Chandrayaan-2

- The Chandrayaan-2 weighing around 3290 kg and would orbit around the moon and perform the objectives of remote sensing the moon.
- India’s second mission to the Moon is a totally indigenous mission comprising of an Orbiter, Lander and Rover.
- The payloads will collect scientific information on lunar topography, mineralogy, elemental abundance, lunar exosphere and signatures of hydroxyl and water-ice.
- After reaching the 100 km lunar orbit, the Lander housing the Rover will separate from the Orbiter.
- After a controlled descent, the Lander will soft land on the lunar surface at a specified site and deploy a Rover.
- The mission will carry a six-wheeled Rover which will move around the landing site in semi-autonomous mode as decided by the ground commands.
- The instruments on the rover will observe the lunar surface and send back data, which will be useful for analysis of the lunar soil.

15. InSight, NASA’s mission

Why in news?
InSight, a NASA spacecraft designed to burrow beneath the surface of Mars landed on the red after a six-month, 482 million-km journey and a perilous, six-minute descent through the rose-hued atmosphere.

- It was NASA’s ninth attempt to land at Mars since the 1976 Viking probes. All but one of the previous U.S. touchdowns was successful.
- NASA last landed on Mars in 2012 with the Curiosity rover.
- The plan called for the spacecraft to go from 12,300 mph (19,800 kph) to zero in six minutes flat as it pierced the Martian atmosphere and settled on the surface.

InSight Mars Mission

- The Interior Exploration using Seismic Investigations, Geodesy and Heat Transport (InSight) mission is a robotic lander designed to study the deep interior of the planet Mars
- It was manufactured by Lockheed Martin, is managed by NASA's Jet Propulsion Laboratory, and most payload instruments it carries were built by European agencies.
- The mission launched on 5 May 2018 aboard an Atlas V-401 rocket and successfully landed at Elysium Planitia on Mars on 26 November 2018
- InSight traveled 483 million km (300 million mi) during its journey
- InSight's objectives are to place a seismometer, called SEIS, on the surface of Mars to measure seismic activity and provide accurate 3D models of the planet's interior; and
measure internal heat flow using a heat probe called HP3 to study Mars’ early geological evolution.

- This could bring a new understanding of the Solar System's terrestrial planets – Mercury, Venus, Earth, Mars – and Earth's Moon.

16. MISSION RAKSHA GYAN SHAKTI

Why in news?
Raksha Mantri has launched ‘Mission Raksha Gyan Shakti’ which showcases salient inventions and innovations achieved by DRDO, Defence PSUs and Ordnance Factories (OFs).

Mission Raksha Gyan Shakti

- As part of the ongoing initiatives to enhance self-reliance in defence, the Department of Defence Production has instituted a new framework titled ‘Mission Raksha GyanShakti’ which aims to provide a boost to the IPR culture in indigenous defence industry.
- The Directorate General of Quality Assurance (DGQA) has been entrusted with the responsibility of coordinating and implementing the programme.
- The event brought out that the end objective of ‘Mission Raksha Gyan Shakti’ is to inculcate IP culture in Indian defence manufacturing ecosystem.
- The IPR has emerged as a key ingredient of an ecosystem which stimulates innovation and ingenuity.

Defence IPRs in India

- An IP Facilitation Cell was established in April this year which has worked tirelessly to achieve ambitious targets of training 10,000 personnel of OFB and DPSUs on IPR and to facilitate filing of at least 1,000 new IPR applications.
- This has resulted in successful filing of Intellectual Property Right (IPR) applications.

17. CRISPR-CAS9, GENE EDITING

Why in news?
Recently a Chinese researcher created an international sensation with his claim that he had altered the genes of a human embryo that eventually resulted in the birth of twin girls.

- If proven, it would be the first instance of human offspring having been produced with specific desired attributes, using newly-developed tools of gene “editing”.
- In the case of the new-born Chinese babies, the genes were claimed to be “edited” to ensure that they do not get infected with HIV, the virus that causes AIDS.

Gene editing

- Genes contain the bio-information that defines any individual.
- Physical attributes like height, skin or hair colour, more subtle features and even behavioral traits can be attributed to information encoded in the genetic material.
- An ability to alter this information gives scientists the power to control some of these features.
- Gene “editing” — sometimes expressed in related, but not always equivalent, terms like genetic modification, genetic manipulation or genetic engineering — is not new.
- It is widely practised in agriculture, to increase productivity or resistance to diseases, etc.
But even in agriculture, genetic modification is a subject of major debate, especially in developing countries, including India.

CRISPR Technology

- CRISPR (short for Clustered Regularly Interspaced Short Palindromic Repeats) technology is a new and the most efficient tool for gene “editing” developed in the last one decade.
- The technology replicates a natural defence mechanism in bacteria to fight virus attacks, using a special protein called Cas9.
- CRISPR-Cas9 is a simple, effective, and incredibly precise technology.

How it works?

- CRISPR-Cas9 technology behaves like a cut-and-paste mechanism on DNA strands that contain genetic information.
- The specific location of the genetic codes that need to be changed, or “edited”, is identified on the DNA strand, and then, using the Cas9 protein, which acts like a pair of scissors, that location is cut off from the strand.
- A DNA strand, when broken, has a natural tendency to repair itself.
- Scientists intervene during this auto-repair process, supplying the desired sequence of genetic codes that binds itself with the broken DNA strand.

Loopholes in Gene Editing

- The technology was used to solve a problem potential infection to HIV that already has alternative solutions and treatments.
- It was not necessary to tamper with the genetic material, which can have unintended, and as yet unknown, consequences.
- There is no way to verify the claims or whether the “editing” was carried out in the proper manner.
- The technology is extremely precise, but not 100% precise every time.
- There is a possibility that some other genes also get targeted. In such scenarios, unintended impacts cannot be ruled out.
- If regulatory approvals were obtained, then there will be data and information gaps about the experiment.

Ethical uses

- The most promising use of the CRISPR technology is in treatment of diseases.
- For example, in sickle cell anaemia, a single gene mutation makes the blood sickle-shaped.
- This mutation can be reversed using gene editing technology.
- In such cases, the genetic codes of just one individual are being changed to cure a disease.

Ethics at Stake

- Gene “editing” capabilities now exist with hundreds of researchers and laboratories across the world.
- Tampering with the genetic code in human beings is more contentious.
- Leading scientists in the field have for long been calling for a “global pause” on clinical applications of the technology in human beings, until internationally accepted protocols are developed.
Core of the Issue

- The Chinese researcher has done is to edit the genes of an embryo. Such a change would be passed on to the offspring.
- The aforesaid experiment has been basically making changes in the genome of the next generation.
- If we allow this, nothing stops people with access to CRISPR technology to produce babies with very specific traits.
- There is this highly problematic issue of trying to produce “designer” babies or human beings.

18. ISRO HAS SUCCESSFULLY LAUNCHED THE PSLV-C43/HYSIS

Why in news?
The ISRO has successfully launched the PSLV-C43/HysIS mission from the Satish Dhawan Space Centre in Sriharikota late.

- This mission, the sixth one this year that will use a polar satellite launch vehicle (PSLV), will see the launch of HysIS – India’s own earth observation satellite.
- The satellite will be accompanied by 29 other satellites developed by various nations, including 23 from the US.

About the Launch

- The PSLV launcher has a total length of 39.4m and consists of a four-stage rocket, that has alternating solid and liquid stages.
- PSLV-C43 is a core-alone version of the launch vehicle, and the lightest one in operation. The combined weight of the satellites is 641.5kg.
- PSLV-C43 mission’s payload consists of the HysIS satellite, one micro-satellite and 29 nano satellites.
- While the 30 foreign satellites will be launched at an altitude of 504 km from the Earth’s surface, ISRO’s HysIS satellite will be launched at an altitude of 636 km.
- The satellite will be put into a polar synchronous orbit, which sets it in motion along the axis that runs along the Earth’s geographic North and South Pole.

HysIS

- HysIS stands for Hyper Spectral Imaging Satellite.
- The objective of the probe is to provide observations within the visible, near infrared and shortwave infrared bands of the electromagnetic spectrum.
- The imaging tools will help the HysIS satellite monitor atmospheric activity and climate change, while also assisting studies of Earth’s magnetic field.
- These observations will have a host of applications, prime among which relate to agriculture, forestry, water management, and coastal patterns.
- The satellite’s payload also consists of a 730W power backup, and a 64Ah Li-ion battery.
- It will continue to make observations till 2023, when the mission ends.
- After this launch, the next big event for the Indian space organisation will be its awaited mission to the moon – Chandrayaan-2 – in early 2019.
1. SAFE CITY PROJECT

Why in news?
The central government has approved a ‘Safe City Project’ for Lucknow at a total cost of Rs 194.44 crore under the Nirbhaya Fund Scheme with an aim to strengthen security of women in public places.

Highlights
- The city will soon have integrated smart control room, exclusive women outposts, pink toilets, night patrols of women police and women help desks in all police stations with counsellors.
- The project would be implemented as a centrally sponsored scheme with the centre and the state sharing the funding in 60:40 ratio.
- It was approved by the Union Ministry of Home Affairs as part of its plans to implement Safe City Projects in eight selected cities — Mumbai, Delhi, Kolkata, Chennai, Bengaluru, Hyderabad, Ahmedabad and Lucknow — under the Nirbhaya Fund Scheme.
- The project is being implemented in consultation with the Ministry of Women and Child Development, Ministry of Urban Development, Ministry of Electronic and Information Technology, respective municipal and police commissioners of the cities besides civil society organisations.
- The other components of the project are an augmentation of existing Asha Jyoti Kendra, implementing safety measures in buses, including installation of cameras, improving street lighting and integration of women power helpline with single Emergency number ‘112’.
- The project also envisages gender sensitisation awareness campaigns and capacity building in collaboration with community and civil society organisations.
- It will be implemented by Uttar Pradesh Police, assisted by the municipal bodies and city transport authorities.

2. IIT Kharagpur, University of Auckland ink pact for research tie-up

Why in news?
Indian Institute of Technology (IIT) Kharagpur and University of Auckland has signed a Memorandum of Understanding (MoU) to foster academic exchange and research collaboration, faculty exchange and visiting/adjunct appointments and Student Mobility.

Key facts
- It is the first strategic partnership of University of Auckland with a Higher Educational Institute of India. As per the MoU, the two renowned organization will explore opportunities in the field of Healthcare technologies, cyber security and artificial intelligence.
- A similar centre is functional in China for eight universities from New Zealand focusing on teacher programs, research collaboration, students and faculty exchanges.
3. MORE COUNTRIES PARTNER TO TARGET ‘ZERO HUNGER’ IN GLOBAL SOUTH

Why in news?
Changsha Declaration came at the end of a forum on international development cooperation in Changsha, China.

Highlights
• The Changsha Declaration aims to ramp up the efforts towards South-South Cooperation - an initiative working to eliminate hunger and malnutrition through the mutual sharing and exchange of good practices, resources, and know-how between countries of the “global south”.
• At the forum’s conclusion, 26 countries and 11 international organizations signed on to the Declaration, which includes more information-sharing towards constructing common policies and programmes.
• The forum coincided with the launch of a new report, jointly published by the Food and Agriculture Organization (FAO), the UN Children’s Fund (UNICEF), World Food Programme (WFP), and the World Health Organization (WHO), alerting of severe food shortages plaguing Asia and the Pacific.
• The region faces risk of “a colossal human loss” if countries in the region do not recommit themselves to ending all forms of malnutrition, regional experts from the four specialized UN agencies warned in a joint press release.
• Director-General for FAO Jose Graziano da Silva announced plans to establish an International Centre of Excellence for Agriculture Innovation and Rural Development in Beijing during the forum; a facility that will provide training in agriculture innovation and promote investment in rural areas in an effort to reach the first 2030 Sustainable Development Goal of zero hunger.

4. INDIA’S OWN ‘SMOG TOWER’ MAY HELP COMBAT AIR POLLUTION

Why in news?
As the city grapples with dangerous levels of air pollution, a Delhi-based startup has proposed to create a 40-feet-tall purifier, which it claims could provide clean air to 75,000 people living within three-km radius around it.

Highlights
• Kurin Systems applied for patent after testing the technology at one of their at-home devices. It got the patent for the “world’s largest as well as the strongest air purifier”.
• Specially designed keeping the national capital’s air condition in mind, a single one of these purifiers can provide clean air within three-km radius of their location, impacting the lives of 75,000 people.
• According to the World Health Organization, India is home to six of the top 10 polluted cities in the world, with Delhi placed on the top of the list.
• As many as 1.2 million people die every year in India due to air pollution, a Greenpeace report published last year showed.
• The purifier, which Kurin calls the ‘City Cleaner’, will have the capacity to clean 32 million cubic metres of air per day, its makers said.
• The device can generate 1,300,000 cubic metres of clean air per hour, they said.
• The air will be purified by using the highly effective H14 grade highly effective particulate arrestance (HEPA) filter, which can clean up to 99.99% of the particulate matter present in the air in conjunction with a pre-filter and activated carbon.
• Kurin City Cleaner can use nine stages of physical filters to clean out 99.99% pollutants from the air.

5. WATER ATMS MAY HELP IN BRIDGING SAFE WATER GAP

Why in news?
For thousands of communities across India, the process of getting drinking water is now the same as the process of getting cash. The government is increasingly starting to accept small water enterprises — such as water ATMs and community purification plants — as an alternative solution to the safe drinking water challenge.

Highlights
• In 2010, the United Nations declared access to clean drinking water as a human right, however with 82 crore people who still do not have access to piped water and 70% of water in the country contaminated by pollutants.
• In 2010, the United Nations declared access to clean drinking water as a human right.
• Community water purification plants have grown from less than 12,000 in 2014 to almost 50,000 in 2018, according to the SWN, as they have been incorporated into government planning.
• To reach the government’s Har Ghar Jal target of 100% piped water by 2030, almost ₹5 lakh crore of infrastructure investment will be required, says government data.
• SWN estimates that if the government is willing to spend less than 10% of that amount on small water enterprises, it could provide safe drinking water at a fraction of the cost.

Findings of reports:
• A recent report by the Comptroller and Auditor General of India (CAG) pointed out that only 18% of the rural population has access to potable piped water, failing to meet the 2017 target of 50%.

The water ATM:
• The water ATM is a dispensation system, which can be automatic with a coin or smart card, or manual.
• Essentially, it’s a community RO.
• Community water purification plants have grown from less than 12,000 in 2014 to almost 50,000 in 2018, according to the SWN, as they have been incorporated into government planning.
• India is ranked at 120 out of 122 countries on the Water Quality Index, said Niti Aayog, adding that 70% of the country’s water supply is contaminated.
• A 2017 report by Water Aid India, titled “Wild Water: The State of the World’s Water”, stated that around 63 million of India’s 833 million rural population has no access to clean drinking water.
• A new report by Safe Water Network (SWN) says the government needs to spend ₹44,000 crore on 2.2 lakh small water enterprises to provide safe drinking water to about 37 crore people, mostly in urban slums where piped water infrastructure is difficult to build, and in rural areas with contaminated water sources.

6. PILOT GANGA GRAMS WILL BE THE ROLE MODEL FOR VILLAGE CLEANLINESS

Why in news?
Union Minister for Drinking Water and Sanitation has said that maintaining sustainable behavior towards better sanitation is everyone’s responsibility. She was speaking in Ganga Gram Swachhchhata Sammelan at Chyavan Rishi Ashram in Chousa Village of Buxar district in Bihar. About four thousands Swachhagrahis, Ganga volunteers, youth organization members, students, women groups and people from all walks of life attended the sammelan.

Highlights
• Ganga Gram is a concept to transform the villages on the bank of river Ganga into ideal villages with emphasis on Open Defecation Free, Solid and Liquid Waste Management, Water Conservation, Ground Water Recharge, modern crematorium, tree plantation, organic and medicinal plants.
• Ganga Gram project had been launched by the Union government as part of its clean Ganga mission, named Namami Gange, for holistic sanitation development in villages on the banks of the Ganges.
• In August the Centre declared all 4,470 villages on the banks of the Ganges, located in Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal, open defecation-free (ODF)
• Of these villages, the Centre and the state governments have identified 24 villages to be taken up under a pilot project to transform them into ‘Ganga Grams’.
• These will be converted into Ganga Grams by 31st December 2018.
• The villages selected will set the benchmark for cleanliness and integrated efforts of development and will be converted into ‘Ganga Grams’.

7. AYUSH-HEALTH MANAGEMENT INFORMATION SYSTEM (A-HMIS)

Why in news?
AYUSH-Health Management Information System (A-HMIS), a dedicated software application for Electronic Health Record (EHR) for the AYUSH systems of Healthcare launched on 3rd Ayurveda Day in New Delhi.
Highlights

- A-HIMS is expected to revolutionise the way Ayurveda, Yoga, Unani, Siddha and Homoeopathy are practised in the country, by inducting modern IT-solutions into these systems.
- This software is launched on the occasion of Ayurveda Day which is celebrated throughout the Country on 5th November.

Ministry of AYUSH

- The Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy, abbreviated as AYUSH.
- It is a governmental body in India purposed with developing, education and research in Ayurveda (Indian traditional medicine), Yoga, Naturopathy, Unani, Siddha, Homoeopathy, Sowa Rigpa (Traditional Tibetan medicine) and other Indigenous medicine systems.
- It was created in March 1995 as the Department of Indian Systems of Medicine and Homoeopathy (ISM&H).

8. UN WORLD FOOD PROGRAMME, ALIBABA GROUP PARTNERED TO ELIMINATE HUNGER

Why in news?
The United Nations World Food Programme (WFP) and Alibaba Group (Alibaba) entered into a strategic partnership to support efforts to achieve the Sustainable Development Goal (SDG) 2 – a world with zero hunger

Highlights

- Under the accord, Alibaba will lend its cutting-edge technology and resources to support the digital transformation of WFP’s operations.
- The cloud computing arm of Alibaba, will work with WFP to develop a digital "World Hunger Map".
- The map will monitor global hunger and operations to end the scourge by 2030.
- Zero hunger is one of the UN’s key Sustainable Development Goals (SDG-2).

Background:
Alibaba established the Alibaba Poverty Relief Program in December 2017, aiming to invest RMB10 billion in five years to alleviate poverty with focuses on education, rural commerce advancement, empowering women, healthcare and environmental sustainability.

World Food Programme (WFP)

- The WFP is the food-assistance branch of the United Nations. It is the world’s largest humanitarian organization addressing hunger and promoting food security.
- It works to help people who cannot produce or obtain enough food for themselves and their families.
- It is a member of the United Nations Development Group (UNDG) and part of its Executive Committee.
- It was established in 1961 after 1960 Food and Agricultural Organization (FAO) Conference.
- It is headquartered in Rome (Italy) and has more than 80 country offices around the world. It provides food assistance to an average of 80 million people in 75 countries each year.
9. POOR DIET BIGGER HEALTH HAZARD THAN KILLER DISEASES: UN BODY

Why in news?
A recent report released by United Nations Food and Agriculture Organization (UN FAO) found that poor quality diet is a greater threat to public health across the world than malaria, tuberculosis or measles etc.

Highlights
- The report was released by the United Nations Food and Agriculture Organization (FAO) co-authored with the Global Panel on Agriculture and Food Systems for Nutrition.
- The report was titled “Preventing nutrient loss and waste across the food system: Policy action for high quality diets”.
- The diet-related factors now account for six of the top nine contributors to the global burden of disease.
- Globally, in 2016, one in five deaths was associated with poor diets including increasing non-communicable diseases (NCDs) associated with the rise of obesity, also linked to poor-quality diets.
- Though the world is producing more food than it needs, an estimated three billion people have inadequate diets.
- Every year, approximately 1.3 billion metric tonnes of food produced for human consumption (one third of the total) never reaches the consumer’s plate or bowl,” stated the report.
- In addition, the scale and pace of food production would not need to increase at the rates currently required to meet the demand of an additional 1 billion people by 2030.
- The report recommended higher consumption of fresh fruits and vegetables and greater dietary diversity to tackle micronutrient deficiencies.
- Food wastage: Across all food groups, half of all food loss and waste was associated with nutrient-rich foods such as fruits, vegetables, legumes and nuts, stated the report.
- In low-income countries, food is mostly lost during harvesting, storage, processing and transportation, while in high-income nations the waste is at retail and consumer level. Together, they directly impact the number of calories and nutrients actually available for consumption, stated the FAO.

Food and Agriculture Organization (FAO)
- It is specialised agency of UN that leads international efforts to defeat hunger.
- Its parent organization is UN Economic and Social Council (UNESC).
- It was established on 16 October 1945 and its headquarters are in Rome, It has 197 member states, along with European Union (member organization).

10. GLOBAL IT CHALLENGE FOR YOUTH WITH DISABILITIES, 2018

Why in news?
“Global IT Challenge for Youth with Disabilities, 2018” is being organised by the Department of Empowerment of Persons with Disabilities (DEPwD) under Ministry of Social Justice and Empowerment.

Highlights
- India is hosting the event in collaboration with the Government of Korea and Rehabilitation International (RI).
- The Global IT Challenge for disability is a capacity building project that helps youth with disabilities to overcome their limitations and challenges for a better future through access to Information and communications technology or (ICT).
It will alleviate the digital divide and expand the participation of youth with disabilities in the society.
It propagates implementation of the United Nations Convention on Rights of Persons with Disabilities (UNCRPD) - Article 21 relates to access to information.
Around 100 youth with disabilities (visual disability, hearing disability, locomotor disability and intellectual disability/developmental disorder) from 18 countries participated. Among them 12 were Indian

11. MOST CHILD DEATHS DUE TO PNEUMONIA IN INDIA

Why in news?
The 2018 Pneumonia and Diarrhea Progress Report, by the International Vaccine Access Center (IVAC) released on the eve of 10th World Pneumonia Day (November 12) describes progress in fighting pneumonia and diarrhoea in 15 countries. India continues to have the highest burden of pneumonia and diarrhoea child deaths in the world, with 1,58,176 pneumonia and 1, 02,813 diarrhoea deaths in 2016.

Key points
- The new report, which looked at progress in fighting pneumonia and diarrhoea in 15 countries with the greatest number of deaths from these illnesses finds health systems are falling woefully short of ensuring the most vulnerable children have access to prevention and treatment services.
- Globally, pneumonia and diarrhoea led to nearly one of every four deaths in children under five years of age in 2016. Authors at the IVAC have also called on the global community to collect better data and target communities of greatest need.
- The report analyses how effectively countries are delivering 10 key interventions breastfeeding, vaccination, access to care, use of antibiotics, oral rehydration solution (ORS) and zinc supplementation to help protect against, prevent, and treat, pneumonia and diarrhoea.
- The measures are proven to help prevent death due to these illnesses and could help achieve the United Nations’ Sustainable Development Goal target of reducing under-five mortality to at least as low as 25 per 1,000 live births by 2030.
- Progress in India home to more under-five pneumonia and diarrhoea deaths than any other country in 2016 has been mixed.
- Increasing coverage of Haemophilus Influenzae Type B (Hib) vaccine, as well as continued scale-up of rotavirus vaccines, first introduced in mid-2016, led to a bump in scoring for these interventions since last year’s report.
- Introduced in 2017, the Pneumococcal Conjugate Vaccine has been included in only six States to date. Further scale-up of the vaccine to all States should be considered.

Pneumonia
- It is form of acute respiratory infection that affects lungs. It is caused by inflammation of the airspaces in the lungs.
- Lungs are made up of small sacs called alveoli, which fill with air when healthy person breathes. When an individual has pneumonia, alveoli are filled with pus and fluid, which makes breathing painful and limits oxygen intake.
• It is caused by number of infectious agents, including viruses, bacteria and fungi. The most common are Streptococcus pneumoniae (most common cause of bacterial pneumonia in children), Haemophilus influenzae type b (Hib) (second most common cause of bacterial pneumonia), Respiratory syncytial virus is most common viral cause of pneumonia.
• Vaccinations are available against several common organisms that are known to cause pneumonia. Besides, antibiotics can also treat pneumonia by controlling the bacterial or fungal infection.

12. INDIA SLIPS IN GLOBAL RTI RATINGS

Why in news?
After making its debut at the second rank in 2011 in the Global index on Right to Information, the year the global RTI agency was launched, India has slipped four positions in the last seven years, to settle at the sixth rank

Key points
• This global RTI rating founded by the Centre for Law and Democracy (CLD), a Canada-based non-governmental organisation, along with Access Info Europe.
• The Ratings are based on 61 indicators which are divided into seven different categories, namely: Right of Access, Scope, Requesting Procedures, Exceptions and Refusals, Appeals, Sanctions and Protections, and Promotional Measures. It examines countries using a 150-point scale to indicate their strengths and weaknesses.
• Afghanistan topped the list scoring 139 out of 150 points followed by Mexico (136), Serbia (135), Sri Lanka (131) and Slovenia (129).
• Austria was placed at the bottom scoring just 33 points.
• India scored 128 out of a possible total of 150 points. India performed worst under the section "Sanctions and Protections", scoring just above 60 percent points.
• Further, India failed to match up to the expectations in five of the sections including scope of the RTI Act, requesting procedures, exceptions and refusals and measures taken to promote the Act, and has scored just above 80 percent points.

Right to Information Act, 2005
• Right to Information (RTI) is an act of the Parliament of India to provide for setting out the practical regime of the right to information for citizens and replaces the erstwhile Freedom of information Act, 2002.
• Under the provisions of the Act, any citizen of India may request information from a "public authority" (a body of Government or "instrumentality of State") which is required to reply expeditiously or within thirty days.
• Information disclosure in India is restricted by the Official Secrets Act 1923 and various other special laws, which the new RTI Act relaxes.
• Right to Information codifies a fundamental right of the citizens of India.
• It will be extended to the whole of India except Jammu and Kashmir.

13. NATIONAL BODY SET UP TO STUDY A RARE FORM OF DIABETES

Why in news?
A National Monogenic Diabetes Study Group has been formed to identify cases of monogenic diabetes across the country.
Key points

- The group is Supported by the Indian Council of Medical Research (ICMR), the Madras Diabetes Research Foundation (MDRF) and Dr. Mohan’s Diabetes Specialities Centre (DMDSC).
- It will be the national coordinating centre for the study group.
- MDRF would provide guidelines to the collaborators for identifying monogenic diabetes.
- They need to look out for certain parameters such as children below six months of age.
- They will also look for those diagnosed as Type 1 diabetes but have atypical features such as milder forms of diabetes, and strong family history of diabetes going through several generations.
- The collaborators will identify cases of monogenic diabetes and send their details.
- They will collect blood samples and following the test results they will be given the treatment.

Monogenic diabetes

- Monogenic diabetes is a rare condition resulting from mutations (changes) in a single gene.
- In contrast, the most common types of diabetes—type 1 and type 2—are caused by multiple genes (and in type 2 diabetes, lifestyle factors such as obesity).
- Most cases of monogenic diabetes are inherited.
- Monogenic diabetes appears in several forms and most often affects young people.
- In most forms of the disease, the body is less able to make insulin, a hormone that helps the body use glucose (sugar) for energy.
- Rarely, the problem is severe insulin resistance, a condition in which the body cannot use insulin properly.

14. HRD MINISTRY LAUNCHES LEAP AND ARPIT FOR HIGHER EDUCATION FACULTY

Why in news?

Union Ministry of Human Resource Development launched two new initiatives viz. Leadership for Academicians Programme (LEAP) and Annual Refresher Programme In Teaching (ARPIT) for higher education faculty. These initiatives help to transform the quality of teaching and improve leaders, thereby enhancing the quality of higher education institutions.

Leadership for Academicians Programme (LEAP)

- Leadership for Academicians Programme (LEAP) is a three weeks Flagship leadership development training programme for second level academic functionaries in publicly funded higher education institutions.
- The main objective is to prepare the second tier academic heads that are potentially likely to assume leadership roles in the future.
- The programme would provide senior faculty, with high academic credentials, the required leadership and managerial skills including skills of problem-solving.
- The implementation of LEAP Programme will be through 15 NIRF top-ranked Indian Institutions.

ARPIT (Annual Refresher Programme in Teaching)

- Annual Refresher Programme in Teaching (ARPIT), a major and unique initiative of online professional development of 15 lakh higher education faculty using the MOOCs platform SWAYAM.
- National Resource Centres (NRCs) is the implementing institution of ARPIT having tasked to prepare online training material with the focus on latest developments in the discipline, new
& emerging trends, pedagogical improvements and methodologies for transacting revised curriculum.

- The training materials will be uploaded and made available through SWAYAM.

**Swayam learning portal**

- SWAYAM (Study Webs of Active–Learning for Young Aspiring Minds) is a platform indigenously developed by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) with the help of Microsoft.
- The objective of this effort is to take the best teaching-learning resources to all, including the most disadvantaged.
- SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy.

15. **NITI AAYOG, UNICEF LAUNCHES UNICEF-ATAL TINKERING LAB HACKATHON**

**Why in news?**

On November 14, 2018, NITI Aayog and UNICEF launched UNICEF- Atal Tinkering Lab Hackthon to commemorate Children’s Day.

**Highlights**

- NITI Aayog, UNICEF organized 72-hour Tinkering Hackathon for School Children.
- NITI’s Atal Innovation Mission (AIM) and UNICEF, have come together to provide an open platform to young children of India, to contribute towards sustainable development.
- The UNICEF - Atal Tinkering Labs Young Champions Awards were presented to the winners of the nationwide Atal Tinkering Marathon challenge launched last year on October 2.
- AIM’s - Atal Tinkering Labs (ATL) had launched a six month long nationwide challenge called the Atal Tinkering Marathon, across six different thematic areas, namely, clean energy, water resources, waste management, healthcare, smart mobility and agri-technology.
- The objective was to encourage students to observe community problems and develop innovative solutions.

**Atal Innovation Mission (AIM)**

- AIM is NITI Aayog’s flagship initiative to promote culture of innovation and entrepreneurship in the country.
- It is mandated to create umbrella structure to oversee innovation ecosystem of country and revolutionizing innovation eco-system – touching upon entire innovation life cycle through various programs.

**Objectives**

- Develop new programmes and policies for fostering innovation in different sectors of economy.
- Provide platform and collaboration opportunities for different stakeholders, create awareness.
- Create umbrella structure to oversee innovation ecosystem of the country.
- The sub-schemes of AIM include establishing Atal Tinkering Labs (ATLs) and Atal Incubation Centers (AICs), for providing scaling up support to Established Incubation Centres.
- It also includes finding ultra-low cost solution to India’s most intractable problems through Atal Grand Challenges and Atal Vikas Challenges.
16. HARVESTING GREEN FUEL FROM WASTEWATER

Why in news?
A purple bacterium which store energy from light can help harvest hydrogen fuel from sewage, and recover carbon from any type of organic waste, scientists have found.

Highlights
- Organic compounds in household sewage and industrial wastewater are a rich potential source of energy, bioplastics and even proteins for animal feed but with no efficient extraction method, treatment plants discard them as contaminants.
- A study is the first to show that supplying electric current to purple phototrophic bacteria can recover nearly 100 per cent of carbon from any type of organic waste, while generating hydrogen gas for electricity production.
- One of the most important problems of current wastewater treatment plants is high carbon emissions.
- Purple phototrophic bacteria capture energy from sunlight using a variety of pigments, which turn them shades of orange, red or brown as well as purple.
- The researchers analysed the optimum conditions for maximising hydrogen production by a mixture of purple phototrophic bacteria species.
- They also tested the effect of a negative current that is, electrons supplied by metal electrodes in the growth medium – on the metabolic behaviour of the bacteria.
- The first key finding was that the nutrient blend that fed the highest rate of hydrogen production also minimised the production of CO2.
- This demonstrates that purple bacteria can be used to recover valuable biofuel from organics typically found in wastewater — malic acid and sodium glutamate — with a low carbon footprint.

17. THERE CAN'T BE A BAN ON USE OF WORD ‘DALIT’ IN MEDIA: PCI

Why in news?
The Press Council of India has recently decided against issuing a directive to the media prohibiting the use of the word “Dalit”.

Background
- The Information and Broadcasting Ministry had issued an advisory to all media outlets to not use the word “Dalit” to refer to members belonging to the Scheduled Castes. The advisory was based on an order of the Bombay High Court on June 6 this year, on a petition filed by Pankaj Meshram.
- In an earlier order on March 15 this year, the Ministry of Social Justice too had issued a similar advisory to all the State governments and Union Territories that in all official transactions, the constitutional term “Scheduled Caste” should be used instead of the word “Dalit”.

PCI verdict
- Reading of the Bombay High Court order is that it did not seek a ban on the word ‘Dalit’. We deliberated on the order and have come to the conclusion that it is advisable not to issue directions/orders prohibiting the use of word ‘Dalit.'
• The PCI added that it had to be adjudicated on case-to-case basis.

About PCI:
• The Press Council of India was first set up in the year 1966 by the Parliament on the recommendations of the First Press Commission with the object of preserving the freedom of the press and of maintaining and improving the standards of press in India.
• The present Council functions under the Press Council Act, 1978.
• It is a statutory, quasi-judicial authority functioning as a watchdog of the press, for the press and by the press.

18. KERALA INTRODUCES NEW OPEN ONLINE LEARNING PROGRAMME- ‘KOOL’

Why in news?
The Kerala Infrastructure and Technology for Education (KITE) has rolled out— KOOL, its Online Open Learning training platform. The platform can be used to train teachers, students and the general public.

Highlights
• KOOL has been designed in a MOOC (Massive Open Online Course) model, which is becoming popular worldwide. Massive Open Online Courses (MOOCs) are available for anyone to enroll.
• It is a major step by the State of Kerala to become India’s first complete digital state in Education.
• It has been developed as an expansion of ‘Samagra’, the resource portal of the education department.
• It has an array of features for learners in the form of animated learning assistants, video tutorials and checklists for practising the activities.
• It would be the largest online training programme in the state.

19. GLOBAL FIGHT ON MALARIA STALLED: WHO

Why in news?
As per the WHO World Malaria Report 2018, India is the only high-burden country moving in a positive direction, with Odisha emerging as the best performing state in its fight against Malaria.

Highlights
• The latest WHO report showed that the number of malaria cases climbed to 219 million last year, two million higher than 2016, while international funding has declined.
• Malaria, which is spread to people through the bites of infected female mosquitoes, occurs in 91 countries but about 90% of the cases and deaths are in sub-Saharan Africa.
• Foreign funding to some of the most affected countries has declined, in certain instances by more than 20 percent for every individual at risk of contracting the disease.
• The disease killed 4,35,000 people last year, the majority of them children under five in Africa.
• WHO said it was embarking on new ways to scale up the battle against one of the world’s deadliest diseases.
• Most malaria cases reported last year were in Burkina Faso, Cameroon, the Democratic Republic of the Congo, Ghana, India, Mali, Mozambique, Niger, Nigeria, Tanzania and Uganda.
• Five countries accounted for nearly half of the cases: Nigeria (25 percent), DR Congo (11 percent), Mozambique (five percent), and India and Uganda with four percent each.
• However countries such as Ethiopia, India, Pakistan and Rwanda recorded “substantial” declines in malaria cases.

India’s Case:
• India has been identified as the top country marking maximum progress in reducing malaria cases among the 11 highest burden countries, registering a 24 per cent decrease in 2017 compared to 2016, according to a World Health Organisation (WHO) report.
• As per the WHO World Malaria Report 2018, India is the only high-burden country moving in a positive direction, with Odisha emerging as the best performing state in its fight against Malaria.
• However, the report suggests that 1.25 billion Indians still remain at the risk of getting diagnosed with malaria.

Malaria
• Malaria is a mosquito-borne infectious disease caused by various species of the parasitic protozoan microorganisms called Plasmodium.
• Malaria is a disease that man has battled with for a long time. The first evidence of this protozoan came from mosquitoes preserved in amber nearly 30 million years ago.
• It is even thought to have brought the Roman Empire to its knees. Malaria was so prevalent during the Roman times that the disease is also called ‘Roman Fever’.
• Today, the credit for actually discovering the parasite is given to Charles Louis Alphonse Laveran, a French physician. He even won the Nobel Prize in 1907 for his findings.

20. ICMR RELEASES GUIDELINES FOR ANTIBIOTICS’ JUDICIOUS USE

Why in news
To ensure judicious use of antibiotics in healthcare facilities, the ICMR released an Antimicrobial Stewardship Guidelines to advise hospitals in setting up Antimicrobial Stewardship Programmes (AMSP) for the purpose.

Highlights
• Antimicrobial resistance (AMR) is a major public health challenge. Since inappropriate use of antibiotics is rampant in India, there is urgent need to improve antibiotic use in hospitals. The increasing consumption of antibiotics is one of key drivers of antimicrobial resistance seen in bugs.
• Antimicrobial resistance (AMR) is a major public health challenge, and with very few new antibiotics in the pipeline, it is important to use the existing drugs judiciously.
These guidelines provide guidance for setting up structure and processes of Antimicrobial Stewardship Programmes in healthcare institutions.

It will help discuss essential elements of antimicrobial stewardship, diagnostic stewardship besides providing information on tools that can be used to measure progress.

The National Health Policy, 2017, terms antimicrobial resistance as one of the key healthcare issues and prioritises development of guidelines regarding antibiotic use, limiting over-the-counter use of antibiotics and restricting the use of antibiotics as growth promoters in livestock.

Hospital-based programmes dedicated to improving antibiotic use have been helpful in improving the quality of patient care and safety through increased infection cure rates, reducing treatment failures, and increasing the frequency of correct prescription for therapy and prophylaxis.

21. HIMACHAL GOVT APPROVES SASHAKT MAHILA YOJNA

Why in news?
Himachal Pradesh cabinet gave an approval to Sashakt Mahila Yojna that aims to empower rural women.

Highlights

- Sashakt Mahila Yojna has the vision to empower rural women by providing them with an interface for organisation and socio-economic development.
- The scheme would link rural women with sustainable livelihood opportunities and improving their skill by imparting training.

Other Scheme related to Women Empowerment by Himachal Pradesh

- Self Employment Assistance for women
- Mahila Vikas Nigam
- Himachal Pradesh Mahila Vikas Protsahan Yojana

22. UP GOVT LAUNCHES NARI SASHAKTIKARAN SANKALP ABHIYAN

Why in news?
Nari Sashaktikaran Sankalp Abhiyan or Women Empowerment campaign launched by Uttar Pradesh government.

Key points

- The campaign is aimed to empower women in the state through various programmes.
- It includes many issues like education, self-employment, health, cleanliness, nutrition.
- During the campaign, women officers and female staff of the state government will go door-to-door in villages of their respective blocks in every district and inform and educate women about the schemes being run by central and state governments for their welfare and security.
23. UN SELECTS NOIDA TO PARTICIPATE IN GLOBAL SUSTAINABLE CITIES 2025 PLAN

Why in news?
The United Nations invited Uttar Pradesh’s, Noida and Greater Noida to become a member of its initiative which aims to create 25 model cities across the world that will be fully compliant with the sustainable development goals by 2025.

Highlights
- The twin-cities in Gautam Buddh Nagar district, adjoining the national capital, have been selected in the "University City" category ahead of Mumbai and Bengaluru, which were also under UN consideration for the initiative as the only invitee from India.
- Overall 25 cities across the world have been selected in five categories by the UN Global Sustainable Development Goals cities initiative.
- In the “University City” category, Noida-Greater Noida will be competing with elite university cities such as Cambridge, Palo Alto and Heidelberg.
- Schatz highlighted that the SDG cities initiative will lead to an "unprecedented inflow" of global knowledge, resources and capacity building into Noida and Greater Noida via various UN agencies, partners and corporate supporters.

Sustainable development Goals (SDGs)
- The documentary screened at the Rio+20 conference – “Future We Want” presented the idea of post 2015 development agenda. Sustainable development Goals (SDGs) is an intergovernmental agreement formulated to act as post 2015 Development agenda, its predecessor being Millennium Development Goals.
- It is a group of 17 goals with 169 targets and 304 indicators, as proposed by the United Nation General Assembly’s Open Working Group on Sustainable Development Goals to be achieved by 2030.
- Post negotiations, agenda titled “Transforming Our World: the 2030 agenda for Sustainable Development” was adopted at the United Nations Sustainable Development Summit. SDGs is the outcome of Rio+20 conference (2012) held in Rio De Janerio and is a non-binding document.
24. HEALTH MINISTRY LAUNCHES HEALTH INFORMATION PLATFORM TO MONITOR PUBLIC HEALTH SURVEILLANCE

Why in news?
Union Ministry Health and Family Welfare has soft-launched Integrated Disease Surveillance Programme (IDSP) segment of Integrated Health Information Platform (IHIP) in seven states. The first one-of-its-kind initiative launched by the Central Government to monitor public health surveillance.

Highlights

- IHIP is real time, village-wise, case based electronic health information system with GIS tagging which will help in prompt prevention and control of epidemic prone diseases.
- The initiative will provide near-real-time data to policy makers for detecting outbreaks, reducing the morbidity and mortality and lessening disease burden in the populations and better health systems.
- The primary objective of IHIP is to enable the creation of standards compliant Electronic Health Records (EHRs) of the citizens on a pan-India basis.
- The EHRs aims to build a comprehensive Health Information Exchange (HIE) as part of this centralized accessible platform.
- The success of this platform will depend primarily on the quality of data shared by the states.
- For effective implementation of the platform, 32,000 people at the block level, 13,000 at the district level and 900 at the state level have been trained.
1. RENAMING OF JHARSUGUDA AIRPORT IN ODISHA

Why in news?
The Union Cabinet chaired by Prime Minister has approved renaming of Jharsuguda Airport, Odisha as “Veer Surendra Sai Airport, Jharsuguda

Highlights
- Veer Surendra Sai is a well-known freedom fighter of Odisha.
- Renaming of the Jharsuguda airport in his name will fulfill long-pending demand of the Odisha Government, which reflects the sentiments of the local public of the respective area.
- It will also be a befitting tribute to the contribution of Surendra Sai, the revered personality associated with the State.

Veer Surendra Sai
- King Maharaja Sai died without an heir. The British Government allowed his widow Rani Mohan Kumari to succeed him, as a result of which disturbance broke out and conflict increased between the recognised ruler and other claimants for the throne of Sambalpur. The most prominent claimant among them was Surendra Sai.
- In time Rani Mohan Kumari became unpopular. Her land revenue policy did not satisfy the Gondi people and Binjhal tribal zamindars and subjects. The British authorities removed Rani Mohan Kumari from power and put Narayan Singh, a descendant of royal family but born of a low caste, as the king of Sambalpur.
- The British Government ignored the claim of Surendra Sai for succession. Rebellion broke out in the regime of Narayan Singh. Surendra Sai and his close associates, the Gondzamindars, created many disturbances. In an encounter with the British troops Surendra Sai, his brother Udyanta Sai and his uncle Balaram Singh were captured and sent to the Hazaribagh Jail where Balaram Singh died. King Narayan Singh died in 1849.
- By virtue of the Doctrine of Lapse, Lord Dalhousie annexed Sambalpur in 1849, as Narayan Singh had no male successor to succeed him. During the uprising of 1857 the sepoys set Surendra Sai and his brother Udyant Sai free. The resistance to British continued in Sambalpur under the leadership of Surendra Sai. He was supported by his brothers, sons, relatives and some Zamindars.

2. KARNATAKA GOVT. FIRM ON TIPUJAYANTI

Why in news?
Tipu Jayanthi, which will be celebrated in Karnataka on November 10, is generating political heat, with the JD(S)-Congress coalition government firm on holding it even as the BJP continues to oppose it, as before.

Tip Sultan
- Tipu Sultan (born Sultan Fateh Ali SahabTipu, 20 November 1750 – 4 May 1799), also known as the Tipu Sahib, was a ruler of the Kingdom of Mysore. He was the eldest son of Sultan Hyder Ali of Mysore.
- Tipu Sultan introduced a number of administrative innovations during his rule, including his coinage, a new Mauludilunisolar calendar, and a new land revenue system which initiated the growth of the Mysore silk industry.
• He expanded the ironcased Mysorean rockets and commissioned the military manual Fathul Mujahidin, and is considered a pioneer in the use of rocket artillery.
• He deployed the rockets against advances of British forces and their allies during the Anglo-Mysore Wars, including the Battle of Pollilur and Siege of Seringapatam. He also embarked on an ambitious economic development program that established Mysore as a major economic power, with some of the world’s highest real wages and living standards in the late 18th century.

3. GUJARAT GOVERNMENT WANTS TO RENAME AHMEDABAD AS KARNAVATI

Why in news?
Gujarat government is planning to rename Ahmedabad as Karnavati.

History of the city
• Historically, the area around Ahmedabad has been inhabited since the 11th century, when it was known as Ashaval.
• Chaulukya ruler Karna of Anhilwara (modern Patan) had waged a successful war against the Bhil king of Ashaval and established a city called Karnavati on the banks of the Sabarmati river.
• Sultan Ahmed Shah in 1411 A.D. Had laid the foundation of a new walled city near Karnavati and named it Ahmedabad after the four saints in the area by the name Ahmed.

4. UNESCO ASIA-PACIFIC AWARD FOR CONSERVATION

Why in news?
The restoration of an aristocratic house project from partial ruin state in Ladakh undertaken by LAMO (Ladakh Arts and Media Organisation) Center has won 2018 UNESCO Asia-Pacific award for Cultural Heritage conservation in Award of Distinction category. LAMO is public charitable trust established to articulate an alternative vision for the arts and media in Ladakh

Highlights
• Award of Distinction: Restoration of LAMO Center from a state of partial ruin in Ladakh.
• Honourable Mention: Rejuvenation of iconic Rajabai Clock Tower and Ruttonsee Muljee Jetha Fountain in Mumbai, along with a project in China.
• Award of Excellence: Shijocho Ofune-hoko Float Machiya, of Kyoto, Japan.
• New Design in Heritage Contexts: Kaomai Estate 1955, Chiang Mai (Thailand) and Harts Mill, Port Adelaide, (Australia).

UNESCO Asia Pacific Heritage Awards
UNESCO Asia Pacific Heritage Awards (since 2000) are given with as the strategic purpose of UNESCO with in the region Asia Pacific. The objective is to motivate the protection of Cultural Heritage sites, which are initiated by any individual organization under private sector or institutional organization.

5. BURIAL URN OF MEGALITHIC ERA UNEARTHED IN KERALA

Why in news?
A huge burial urn dating back to the Megalithic era was unearthed while clearing a private road to a house at Hydermettu, in Kerala.
Highlights

- It is believed to be one of the major findings that would shed light on life in the pre-historic era on the western side of the Western Ghats.
- The urn is said to be the largest one unearthed from the region so far.
- It is 3-ft wide at its mouth.
- Moreover, there are art works on it — a pointer to the cultural awareness of a society that belonged to the pre-historic period.
- A large number of burial urns have been unearthed from Ramakkalmedu, Mundieruma and Puzhpakandam nearby in the recent past.

Megalithic Era

A megalith is a large stone that has been used to construct a structure or monument, either alone or together with other stones. The word megalithic describes structures made of such large stones without the use of mortar or concrete, representing periods of prehistory characterised by such constructions.

6. RS 75 COMMEMORATIVE COIN TO MARK ANNIVERSARY OF TRICOLOUR HOISTING BY BOSE

Why in news?
The Union Ministry of Finance on decided to release a Rs 75 commemorative coin on the occasion of 75th anniversary of the hoisting of Tricolour for the first time by Netaji Subhash Chandra Bose at Port Blair. Earlier on October 21, Prime Minister hoisted the National Flag at Red Fort and unveiled the plaque to commemorate the 75th Anniversary of the formation of Azad Hind Government, formed by Bose.

Highlights

- The coin will bear the portrait of Netaji Subhash Chandra Bose saluting the flag on the background of cellular jail.
- A numeral 75th along with inscription “anniversary” will be depicted below the portrait.
- There will be inscription in both Devanagari script and English saying 'First Flag Hoisting Day'.
- The 35-gram coin will be composed of 50 percent silver, 40 percent copper and 5 percent each of nickel and zinc.

Flag Hoisting by Netaji Subhash Chandra Bose

- During his visit to Andaman in on December 30, 1943, Subhash Chandra Bose hoisted the Tricolor for the first time on free Indian soil at Cellular Jail of Port Blair, much before India attained Independence declaring the island as the free territory from the British rule.
- On the same occasion, he announced the freedom of Andaman & Nicobar Islands, the first Indian Territory, from the British rule. The island at that time was liberated from British rule by Japan which captured it during the World War - II.
- Currently, the place where the flag was hoisted stands as a great memorial, and one of the best places to visit in Andamans. It was built by the Andaman Club as a mute testimony of Netaji’s visit to the islands.

7. RANILAXMIBAI

Why in news?  
The Prime Minister, has paid tributes to Rani Lakshmibai on her Jayanti (November 19)
Rani laxmi bai

- Rani Lakshmibai, one of the warriors of India's struggle for Independence, was born as Manikarnika Tambe in 1828 in Varanasi.
- She lost her mother at the age of four and was raised in an unconventional way by her father who worked as an advisor in the court of Peshwa.
- He supported her in learning horsemanship, archery, self-defense, and shooting.
- In 1842, Lakshmibai got married to Gangadhar Rao Newalkar, the Maharaja of Jhansi and got the name of Rani Lakshmibai. Few years after marriage, in 1851, Manikarnika gave birth to a boy but he couldn't survive and died after four months.
- Then Lakshmibai and Gangadhar Rao adopted Rao's cousin's son, Anand Rao, who was later renamed as Damodar.
- Soon after they adopted Anand, Maharaja died due to an illness in 1853. Rani Lakshmibai was just 18 at that time.
- The East India Company took advantage of the Maharaja's death and applied the Doctrine of Lapse.

8. KAMBALA

Why in news?
The coastal districts of Dakshina Kannada and Udupi are all set for the kambala. The races would be held under the auspices of the District Kambala Committee.

Background:
Karnataka government had promulgated Prevention of Cruelty to Animals (Karnataka Amendment)Ordinance, 2017 on July 20 last year. The President gave his assent to the Prevention of Cruelty to Animals (Karnataka Amendment) Bill making Kambala a legal rural sport in Karnataka. The Bill seeks to exempt kambala and bullock-cart racing from the ambit of the Prevention of Cruelty to Animals (PCA) Act, 1960.

Kambala:
- Kambala in its traditional form is non-competitive with buffalo pairs made to race one after another in paddy fields, which is considered a thanksgiving to the Gods for protecting the animals from diseases.
- Over the years, it has however become an organised sport with animal rights activists claiming that the buffaloes run in the race due to fear of being beaten, which the organizers dismiss, saying no violence is involved and that several modifications had been made to ensure that it is an animal friendly event.

9. SENTINELESE TRIBE

Why in news?
An American national was killed allegedly by the Sentinelese tribe in the Andaman and Nicobar Islands after he illegally entered the protected zone on November 16.

Sentinelese:
- The Sentinelese are a negrito tribe who live on the North Sentinel Island of the Andamans.
- North Sentinel Island and its buffer zone is strictly restricted under the Protection of Aboriginal Tribe (Regulation), 1956 and Regulations under Indian Forest Act, 1927.
- The inhabitants are connected to the Jarawa on the basis of physical, as well as linguistic similarities. Their numbers are believed to be less than 150 and as low as 40.
Based on carbon dating of kitchen middens by the Anthropological Survey of India, Sentinelese presence was confirmed in the islands to 2,000 years ago. Genome studies indicate that the Andaman tribes could have been on them islands even 30,000 years ago.

The Govt. of India issued the Andaman and Nicobar Islands (Protection of Aboriginal Tribes) Regulation, 1956 to declare the traditional areas occupied by the tribes as reserves.

It prohibited entry of all persons except those with authorisation. Photographing or filming the tribe members is also an offence. The rules were amended later to enhance penalties.

But restricted area permits were relaxed for some islands recently. In a major step earlier this year, the Indian government excluded this island and 28 others in the Union Territory from the Restricted Area Permit or RAP regime till December 31, 2022. The lifting of RAP means foreigners can go to the island without permission from the government.

**Hostility to outsiders**

- The Sentinelese have been fiercely hostile to outside contact.
- But in 1991 they accepted some coconuts from a team of Indian anthropologists and administrators.
- Some researchers argue that the Sentinelese have been mostly left alone even from colonial times, unlike other tribes such as the Onges, Jarawas and Great Andamanese, because the land they occupy has little commercial attraction.

**10. SANGAI TOURISM FESTIVAL**

**Why in news?**

Every year the State of Manipur celebrates the “Manipur Sangai Festival” from 21st to 30th November.

**Sangai festival**

- Sangai festival is an annual cultural festival organised by Manipur Tourism Department every year from November 21 to 30. Even though many editions of this Festival has been celebrated over the past few years with the name of Tourism Festival, since 2010 this has been renamed as the Sangai Festival to stage the uniqueness of the shy and gentle brow-antlered deer popularly known as the Sangai Deer, which is the state animal of Manipur.
- As this festival is being celebrated to promote Manipur as a world class tourism destination, it showcases the best of what the state has to offer to the world in terms of art and culture, handloom, handicrafts & fine arts, indigenous sports, cuisines & music, eco & adventure sports as well as the scenic natural beauty of the land.

**11. JALLIANWALA BAGH MASSACRE**

**Why in news?**

Government of India has decided to mark the remembrance of 100 years of the historical Jallianwalla Bagh Massacre next year on 13 April 2019.

**Highlights**

- The Government is planning to renovate the historical site by creating suitable infrastructure for providing basic amenities for the tourists.
A number of commemorative as well as constructive activities will be taken up during the remembrance period.

The commemorative coin and postage stamps will be released on 13th April 2019 (the day the incident took place 100 years ago).

Ministry of Culture will organize cultural activities like kavi sammelan, plays, exhibition, seminars, etc. across the country.

A Committee is constituted to ensure timely implementation to Renovate, upgrade and beautify the Jallianwalla Bagh Memorial, and Develop Virtual Reality Theme Based show at the Memorial.

The Ministry of Tourism earmarked an amount of Rs. 8 crore under Swadesh Darshan Scheme for development of Virtual Reality Theme Based show at the Memorial. The Ministry of Culture will provide additional funds, if needed.

Jallianwala Bagh shall continue to remind the young generation about the sacrifices made in freedom struggle.

Background:

It is also known as the Amritsar Massacre (dated April 13, 1919) at Jallianwala Bagh, Amritsar, Punjab.

On 13th April 1919, thousands of people were gathered at Jallianwala Bagh. This day marks the beginning of New Year for the Sikhs, also celebrated as Baisakhi festival all over Punjab.

Colonel Reginald Dyer had announced curfew and a ban on all processions that even prohibited a group of 4 or more people to meet publicly. However, General Dyer sensed the number of people present there and the secret meeting that was about to take place. Thus, he arrived with armed troops and ordered to open fire.

The troops were ordered to start shooting; this heinous act of violence resulted in extreme mass killing.

To keep in mind this significance of this place, a trust was founded in 1920 to build a memorial site at Jallianwala Bagh. American architect, Benjamin Polk, built the memorial site which was inaugurated by the then President of India, Rajendra Prasad on 13 April 1961.

12. CHARDHAM PROJECT

Why in news?
Government’s ambitious plan to connect the Char Dham pilgrimage spots in Uttarakhand by all-weather highways was put under a question mark. The Supreme Court (SC) has sought the Centre’s response on why it should not stay the National Green Tribunal’s (NGT) clearance to the project.

What’s the issue?

The proposed four-lane expressway to Gangotri, Yamunotri, Kedarnath and Bardinath in the hill state has been among the flagship projects of the Ministry of Road Transport and Highways.

But the idea of the 900-kilometre road network in the sensitive mountains of Uttarakhand drew scepticism from environmental activists who fear the highways and the tourists they would bring in will be at the cost of the ecological balance.

Chardham project:

The project involves developing and widening 900-km of national highways connecting the holy Hindu pilgrimage sites of; Badrinath, Kedarnath, Gangotri, and Yamunotri at an estimated cost of Rs.12,000 crores.
• The highway will be called Char Dham Mahamarg (Char Dham Highway) and the highway construction project will be called as Char Dham Mahamarg Vikas Pariyojana (Char Dham Highway Development Project).
• The roads will be widened from 12m to 24m and the project will involve construction of tunnels, bypasses, bridges, subways and viaducts.
1. LADAKH RESTORATION PROJECT WINS UNESCO AWARD

Why in news?
Restoration of an aristocratic house from a state of partial ruin in Ladakh has won a UNESCO Asia-Pacific award for conservation.

Highlights
- The Ladakh project won in the category of Award of Distinction under UNESCO Asia-Pacific Awards for Cultural Heritage Conservation.
- The LAMO Center in Jammu and Kashmir’s Ladakh region was chosen for its systematic restoration project that used salvaged and local building materials, and indigenous construction techniques while adroitly introducing modern amenities to assure its ongoing use.
- The recovery of the aristocratic house from a state of partial ruin establishes an important precedent for conserving the non-monumental urban fabric of Leh Old Town.
- Strategically located at the foot of the Leh Palace, the restored structure contributes significantly to the continuity of the historic townscape dating back to the 17th century.
- In Mumbai, the restoration projects of the iconic Rajabai Clock Tower of Mumbai University and Ruttonsee Muljee Jetha Fountain, both belonging to the colonial-era have received Honourable Mention.

UNESCO Asia-Pacific awards for cultural heritage conservation programme
- The awards were launched in 2000 by UNESCO for cultural heritage conservation programme.
- They are given under four categories- Award of Excellence, Awards of Distinction, Awards of Merit and Award for New Design in Heritage Context.
- These awards aim at acknowledging efforts taken to restore and conserve historical structures without affecting their heritage value in region comprising 48 countries.
- They are being given to encourage the efforts of all stakeholders and the public in conserving and promoting monuments and religious institutes with rich heritage in the Asia-Pacific region.

2. DELHI POLICE LAUNCHES E-LEARNING PORTAL: 'NIPUN'

Why in news?
Delhi Police has launched an e-learning portal NIPUN to impart training and provide up to date information to police officers. Through the website, Delhi Police will be using advanced technology in imparting in-service training to its personnel.

Highlights
- The e-learning portal aims at imparting online training and information through specialized courses designed by experts.
- It will benefit the police officers investigating various cases by providing online resource and information on the law, standing orders, investigation checklists, forms for case files, latest High Court and Supreme Court rulings.
- Under the project Collaborative Learning and Partnership (CLAP) many of the courses have been developed in-house while others have been made in collaboration with the University
Grant Commission (UGC), FICCI, NHRC, NCPCR, and Janaki Devi Memorial College, Delhi University.

- The website of the Training Department is aimed at facilitating information sharing between the faculty and the trainees at the Police Training Institutes of the Delhi Police.
- The website provides the training syllabus, study material, sample question papers, manuals, law and so on.

3. HIMACHAL FLAGS OFF ‘STARTUP VAN’ FOR YOUTH

Why in news?
Himachal Pradesh Chief Minister flagged off a "Startup Yatra" saying the state's Startup programme is aimed at turning its educated youths into job providers from job seekers. Flagging off the 'Startup Yatra' van from his official residence, he said the state government would provide all possible helps to youths to develop entrepreneurship under this scheme.

Highlights
- The basic objective of this scheme was to create self-employment and employment, upgrading the skills of entrepreneurs and to provide them support to set up their units under professional guidance.
- The scheme also aims at helping entrepreneurs to select viable projects in the potential areas in the manufacturing and service sectors and training them to set up startups and running them professionally.
- The key focus areas of the scheme would be technology-driven innovation sector, rural infrastructure and facilities, crafts, arts, water and sanitation, renewal energy, healthcare, clean tech, agriculture, horticulture and related areas, food processing, retail, tourism and hospitality, mobile, IT and biotechnology.
- The scheme had provisions for the creation of incubation centres in many institutions in the state in order to build capacities, develop networking, establishing necessary infrastructure and generating awareness.

4. LITERACY LEVELS IN RURAL INDIA SUFFER DUE TO MIGRATION, FINDS UNESCO STUDY

Why in news?
The new 2019 Global Education Monitoring (GEM) Report by UNESCO, entitled ‘Building bridges not walls’, draws attention to the impact of internal migration on education, highlighting the steps India has taken to address it, and the challenges that remain.

Findings
- In India, 10.7 million children aged 6 to 14 lived in rural households with a seasonal migrant in 2013. About 28% of youth aged 15 to 19 in these households were illiterate or had not completed primary school, compared to 18% of the cohort overall.
- About 80% of seasonal migrant children in seven cities lacked access to education near work sites, and 40% are likely to end up in work rather than education, experiencing abuse and exploitation.
- The construction sector absorbs the majority of short-term migrants.
- Inter-State migration rates have doubled between 2001 and 2011. An estimated 9 million migrated between States annually from 2011 to 2016.
- It also warns of the negative impact on education for children who are left behind as their parents migrate: Test scores were lower among left-behind children aged 5-8.
- The report, however, acknowledges that India has taken steps to address the issue.
• Some State governments have also taken steps for migrant children’s education. It, however, observes that most interventions are focused on keeping children in home communities instead of actively addressing the challenges faced by those who are already on the move.

• The report sees the growth of slums and informal settlements where schools are often scarce due to migration as a challenge. 18% of the students displaced by a riverfront project in Ahmedabad dropped out and an additional 11% had lower attendance.

• The report shows there is only one urban planner for every 1,00,000 people in India, while there are 38 for every 1, 00,000 in the United Kingdom.

Challenges:
• The Report notes that most interventions are focused on keeping children in home communities instead of actively addressing the challenges faced by those who are already on the move.

• Failed initiative: “A pilot programme used on brick kiln sites from 2010-2011 in Rajasthan to track the progress of out-of-school children did not improve learning in any substantial way.

• Teachers on the sites cited culture, language, lifestyle, cleanliness and clothing as major barriers between them and the kiln labour community. Teacher and student absenteeism were rampant.

• Another major education challenge presented by large scale internal migration is the growth of slums and informal settlements, where schools are often scarce.

Globally, the Report estimates that there will be an additional 80 million children living in slums by 2030. In Mumbai, between 100 and 300 families were arriving looking for work every day.

Addressing the issue
• The Right to Education Act in 2009 made it mandatory for local authorities to admit migrant children.

• Gujarat introduced seasonal boarding schools to provide migrant children with education and collaborated with non-government organizations (NGOs) to begin online tracking of the children on the move.

• In Maharashtra, village authorities called upon local volunteers to provide after-school psychosocial support to children who had been left behind by seasonal migrating parents.

• Tamil Nadu provides textbooks in other languages to migrant children.

• Odisha assumed responsibility of seasonal hostels run by NGOs and works with Andhra Pradesh to improve migrant well-being.

5. INDIA SLIPS TWO PLACES TO 53RD POSITION ON GLOBAL TALENT RANKING

Why in news?
India slipped two positions to rank at 53rd position in a global survey released by IMD Business School Switzerland on fostering and attracting talent. In 2017, India was ranked at 55th position.

Highlights of the report
• Switzerland has topped the global ranking for the fifth year in a row, it is followed by Denmark, Norway, Austria and the Netherlands in the top-five.
• Within Asia, Singapore has topped the charts with a global 13th place on the list that ranks 63 countries in developing, attracting and retaining talent.
• China is ranked lower at 39th "because of its difficulties in attracting foreign skilled workers paired with a level of public expenditure on education that is below the average of other advanced economies.
• The rankings are based on three factors: Investment and Development, Appeal, and Readiness.
• These factors include indicators that capture the resources invested in developing local talent, the extent to which a country attracts and retains talent, and the quality of skills available in the talent pool. Its position has declined from 55th in 2017 to 53rd this year.
• The country performs above the average in terms of the quality of its talent pool (Readiness factor, 30th position).
• On the other, the quality of its educational system and the lack of investments in public education heavily penalise the talent potential of the country (Investment and Development factor, 63rd).

6. ICGS VARAHA

Why in news?
Indian Coast Guard (ICG) launches new Offshore patrol vessel (OPV) ICGS Varaha at L&T Kattupalli shipyard near Chennai, Tamil Nadu.

Highlights
It is fourth in the series of 98 M OPVs designed and built indigenously by Larsen & Toubro (L&T). This ship will be fitted with advanced technology navigation and communication equipment, sensor and machinery. The weapon will include one 30 mm and two 12.7 mm guns with fire control system.

ICGS Varaha
• This ship will be fitted with advanced technology navigation and communication equipment, sensor and machinery. The weapon will include one 30 mm and two 12.7 mm guns with fire control system.
• It has been designed to attain the maximum speed of 26 knots and has the endurance of 5,000 nautical miles.
• It also equipped with an Integrated Bridge System (IBS), Automated Power Management System (APMS), Integrated Platform Management System (IPMS) and High Power External Fire Fighting (EFF) system.
• It can carry one twin-engine helicopter and four high-speed boats, including two inflatable boats, for boarding operation, search and rescue, law enforcement and maritime patrol. It will also be capable of carrying pollution response equipment to contain oil spill at sea.

7. BORDER AREA DEVELOPMENT PROGRAMME (BADP)

Why in news?
The Centre has released more than Rs. 113 crore to six border states as part of its plan to ameliorate the problems of people living in isolated locations.

Highlights
• The Home Ministry recently released Rs. 113.36 crore to Assam, Nagaland, Sikkim, Gujarat, Rajasthan and Uttarakhand under the Border Area Development Programme (BADP).
• The home ministry, till now, has released a total of Rs. 637.98 crore during the 2018-19 period to states having an International Border, a government official said.
• The funds released are in addition to the Rs. 1,100-crore released in 2017-18 for the all-round development of villages located along the International Border in 17 states.

About the Border Area Development Programme
• The Department of Border Management, Ministry of Home Affairs has been implementing the Border Area Development Programme (BADP) through the State Governments as part of a comprehensive approach to Border Management. The programme aims to meet the special development needs of the people living in remote and inaccessible areas situated near the international border and to saturate the border areas with the essential infrastructure through convergence of Central/State/BADP/Local schemes and participatory approach.
• BADP was initiated in the border areas of the western region during that Seventh Five Year Plan period for ensuring balanced development of border areas through development of infrastructure and promotion of a sense of security among the border population. The programme now covers 394 border blocks of 111 border districts in 17 States, which includes 167 border blocks in 55 districts of 8 North East, States (including Sikkim), located along the international land border. The State covered are Arunachal Pradesh, Assam, Bihar, Gujarat, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tripura, Uttar Pradesh, Uttarakhand and West Bengal. Under this programme priority is given to the areas closer to the border.
• BADP is an important intervention of the Central Government to bring about development of border areas by supplementing the State Plan Funds to bridge the gaps in socio-economic infrastructure on one hand and improving the security environment in border areas on the other.

8. WORLD’S FIRST AI NEWS ANCHOR DEBUTS IN CHINA:

Why in news?
The world’s first artificial intelligence (AI) news anchor made “his” debut at the ongoing fifth World Internet Conference in east China’s Zhejiang province.

Highlights
• The AI news anchor has a male image with a voice, facial expressions and actions of a real person.
• He learns from live broadcasting videos by himself and can read texts as naturally as a professional news anchor.
• The AI news anchor was jointly developed by Xinhua and the Chinese search engine company, Sogou.com. The AI anchor has become a member of reporting team and can work 24 hours a day on its official website and various social media platforms, reducing news production costs and improving efficiency.