**Insights Daily Current Affairs, 01 October 2016**

**Aircraft with Indian airborne warning system set for induction**

-DRDO developed a multisensor airborne early warning and control (AEW&C) system on a carrier jet, providing an airborne surveillance system in collaboration with CAB (Centre for Airborne Systems) for the Indian Air Force.

-It is the first native AEW system developed by DRDO and CAB.

It was completely developed and built using the native technology platform, EMB-145.

-Utility of AEW&C for Indian Air Force

• Detection and tracking, identification and classification of threats through its ‘sharp-seeing and listening’ radar that can look out deep across enemy territory.

• Guidance and interception control,

• Display of air situation picture and multisensor data integration.

-AEW&C system platform details

• The jet platform selected for system is modified version of the Embraer EMB-145 from Brazil.`

•The system enables the armed forces to communicate with fighter jets and other AEW&C assets, while • It also allows for –

* Search and Rescue (SAR) operations,
* mission planning
* record and replay for post mission analysis

• It has 240° coverage through two radiating planar arrays which are fixed in back-to-back arrangement in an active antenna array unit (AAAU).

**T.N. tops list of endemic flowering plants**

According to a recent publication by the Botanical Survey of India (BSI)- Endemic Vascular Plants of India, almost one of every four species of flowering plants found in India is endemic to the country.

Key facts:

* Tamil Nadu accounts for the highest number of species with 410, followed by Kerala with 357 and Maharashtra with 278.
* Among the most widely exploited endemic plants in country is Pterocarpus santalinus, commonly known as red sandal wood, which is found only in the southern parts of the Eastern Ghats. This plant is classified as critically endangered under International Union for Conservation of Nature (IUCN) category because of its dwindling habitat due to economic over-exploitation.

**‘Citizenship amendment bill communally motivated’: Activists**

Civil society groups are opposing the Citizenship (Amendment) Bill, 2016, terming it “communally motivated humanitarianism.”

Why is it being opposed?

The proposed amendment to the Citizenship Act, 1955, seeks to grant citizenship to non-Muslim minorities from Muslim majority countries, namely, Hindus, Sikhs, Buddhists, Jains, Parsis and Christians from Afghanistan, Bangladesh and Pakistan.

* According to activists, this would mean, for instance, that the sizeable population of Hindu migrants from Bangladesh living in Assam would become citizens while Muslims who migrated to Assam from East Bengal a century ago would continue to be harassed as ‘illegal migrants from Bangladesh.
* The new Bill also violates Article 14 of the constitution, say activists. Since Article 14 of the Constitution guarantees equality to all persons, citizens and foreigners, differentiating between people on the grounds of religion would be in violation of the constitution.

The Citizenship (Amendment) Bill, 2016- Highlights of the Bill:

* The Bill amends the Citizenship Act, 1955 to make illegal migrants who are Hindus, Sikhs, Buddhists, Jains, Parsis and Christians from Afghanistan, Bangladesh and Pakistan, eligible for citizenship.
* Under the Act, one of the requirements for citizenship by naturalisation is that the applicant must have resided in India during the last 12 months, and for 11 of the previous 14 years. The Bill relaxes this 11 year requirement to six years for persons belonging to the same six religions and three countries.
* The Bill provides that the registration of Overseas Citizen of India (OCI) cardholders may be cancelled if they violate any law.

Sources: the hindu.

**Facts for Prelims**

* **INDOSAN**: INDOSAN is envisaged as an annual national event, that brings together all stakeholders working in sanitation government, NGOs, academicians, researchers, partner agencies, corporates on one platform for a shared vision. Bringing together all such stakeholders, will create an opportunity for collective vision, collective understanding of the key elements of the Swachh Bharat Mission programme. INDOSAN is the platform, where unfolding story of Swachh Bharat will actually happen, where each state will share their approaches most suitable to them to reach ODF. INDOSAN will discuss on all these approaches, emerging innovations, learnings are cross shared, for the benefit of all. It was recently held in New Delhi.

* **Sports Sector Gets the Infrastructure Status:** Sports infrastructure will be included under the Harmonized Master List of Infrastructure Subsectors. This is mainly aimed at addressing the issue of deficit of sports infrastructure in the country.

Impact –

* + The sports sector now becomes eligible for obtaining long term financial support from banks and other financial institutions on the same principle as is available to other infrastructure projects.
  + encourage private investment in a public good which has socio-economic externalities in
  + contribute to the economy
  + promotion of health and fitness of the people of this country
  + provide opportunities for employment in the new and exciting sectors.

* **‘Nasha Mukt Bharat Andolan Yatra’**: It is a nation-wide campaign to make society liquor free. It would be launched at Kanyakumari in Tamil Nadu on October 2 to mark the birth anniversary of Mahatma Gandhi.

**Insights Daily Current Affairs, 03 October 2016**

**Two-thirds of elderly financially dependent on others, says study**

-Why in news

According to a recent survey by Agewell Foundation, around 2/3rd( 65 per cent) of the elderly in India are dependent on others for their financial requirements and undergo financial crisis.

-Key findings of the survey

• Pension was the main source of income for 38 per cent of the respondents.

• More than 80% of the respondent’s major problems were related to healthcare issues, where financial status plays a key role.

• Senior citizens aged over 70 are marginalized and isolated to a large extent.

• Older persons in the category of 60-70 years are looked after well by their children, but with further advancement in their age, children find it difficult because of their own growing age and ever-increasing responsibilities towards their own children

• Financially insecure old people expect social security, free health care and subsidies so that they can lead a comfortable and respectable life in old age.

-Rights of the Elderly

• Parents cannot be evicted from a house without due process of law if they have been staying there from before. There is three enactments that can be applied.

* Under section 125 of the CrPC, a magistrate can order a child to maintain his old parents under the Maintenance of Parents Act.
* The Hindu Adoptions and Maintenance Act say an aged parent can demand maintenance from children in the same way that a wife can demand it from her husband.
* The Domestic Violence Act too provides parents with the right to seek relief from any kind of abuse.

• A National Policy on Older persons was announced in January 1999 which identified a number of areas of intervention-financial security, healthcare and nutrition, shelter, education, welfare, protection of life and property for the wellbeing of older persons in the country.

• A National Council for Older Persons (NCOP) was constituted by the MoSJE to operationalize the National Policy on older persons

**Rs. 65,250 cr. mopped up via new black money window**

The Central Board of Direct Taxes (CBDT) has received total disclosures of Rs. 65,250 crore under the Income Disclosure Scheme, 2016 in the form of cash and other assets.

* A four-month window was provided under the scheme for declaring undisclosed income or black money.

Background:

* The Income Declaration Scheme offered people with undisclosed income to declare it by paying a penal tax rate of 45% on such income.
* Assets specified in the declaration were exempted from Wealth tax.
* These declarations also enjoyed immunity from prosecution under the IT Act, Wealth Tax Act and the Benami Transactions (Prohibition) Act, 1988.

**India to push for funds at climate talks**

At the upcoming climate talks in Morocco in November, India is planning to stress most on trying to operationalise the $100 billion corpus — called the Green Climate Fund — committed by developed countries. Only a fraction of it has been pledged so far.

* India would push for developed countries to make good on their prior commitments on finance and technology. So far, India has received only $2 million of the $10 million committed this year.

Green Climate Fund (GCF):

The Green Climate Fund (GCF) is a fund within the framework of the UNFCCC founded as a mechanism to redistribute money from the developed to the developing world, in order to assist the developing countries in adaptation and mitigation practices to counter climate change.

How it helps?

* The Green Climate Fund will support projects, programmes, policies and other activities in developing country Parties using thematic funding windows.
* It is intended to be the centrepiece of efforts to raise Climate Finance of $100 billion a year by 2020.
* The Fund will promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change.
* The Fund will strive to maximize the impact of its funding for adaptation and mitigation, and seek a balance between the two, while promoting environmental, social, economic and development co-benefits and taking a gender-sensitive approach.

Who will govern the Fund?

* The Fund is governed and supervised by a Board that will have full responsibility for funding decisions and that receives the guidance of the COP.
* The Fund is accountable to, and functions under the guidance of, the COP.

Sources: the hindu.

*Paper 2 Topic: Separation of powers between various organs dispute redressal mechanisms and institutions.*

**Bihar brings in new law banning liquor consumption, will challenge HC order**

Background:

Recently, the Patna High Court had quashed the government notification banning the consumption, storage and sale of all types of liquor in the state. The court held that the penal provisions were “unreasonable and draconian” and “cannot be justified in a civilised society”.

• The Bihar government issued a notification under the Bihar Excise Act, 1915 banning the manufacture, sale, and distribution, as well as the possession and consumption of alcohol.

• It also reversed the burden of proof, requiring the accused to prove her innocence to avoid imprisonment.

• Supreme Court, however, has stayed the operation of the Patna High Court judgment, allowing the continuation of a draconian prohibition law in Bihar.

Bihar government has notified the Bihar prohibition and excise act, 2016.

Key facts:

* This is a new and more stringent liquor-ban law with provisions such as arrest of all adults in the family if anyone consumes or stores alcohol.
* It aims to ensure that the ban on sale and consumption of alcohol, including Indian-made foreign liquor (IMFL), continues in Bihar.
* Those flouting the ban face up to 10 years in jail, a fine of up to Rs 10 lakh and there is also a provision to confiscate the house or premises where liquor is stored or drunk.
* Though in a rare case, it also prescribes death penalty if people die after consuming hooch.
* Enforcement of the new law, calculated to impose prohibition in a holistic manner, would repeal the previous excise laws in the state.

Way ahead:

Experts say the new law – which contains many of the provisions of the law that was scrapped – will immediately be challenged in court.

Sources: the hindu.

**Facts for Prelims:**

**5th International Buddhist Conclave**

* It is being organized by the Ministry of Tourism in Varanasi-Sarnath in collaboration with the State Governments of Uttar Pradesh and Bihar.
* Participants in the Buddhist Conclave will include international Buddhist opinion makers, tour operators and media, as well as State Governments and domestic tour operators promoting pilgrimages to the Buddhist sites in the country.
* The International Buddhist Conclave is also one of the initiatives being taken by India as its commitment as the land of origin of Buddhism and to improve the experience of pilgrims as well as tourists wishing to savor the essence of Buddhist heritage, at the Buddhist sites of the country.
* The Conclave will include presentations, panel discussion, business to business meetings between the international and domestic tour operators, an exhibition highlighting the Buddhist attractions in India, as well as visits to important Buddhist sites in and around Varanasi and Sarnath.

**Vayoshreshtha Samman-2016**

* They are National Awards for Senior Citizens. They were recently presented by the President to eminent senior citizens and institutions in recognition of their service towards the cause of elderly persons, especially indigent senior citizens.
* Vayoshreshtha Samman is a Scheme of National Awards instituted by the Ministry of Social Justice & Empowerment (D/o Social Justice & Empowerment) initially in 2005 and was upgraded to the status of National Awards in 2013, for institutions involved in rendering distinguished service for the cause of elderly persons especially indigent senior citizens and to eminent citizens in recognition of their service/achievements.
* Ministries of Social Justice & Empowerment, Health and Rural Development are running such useful schemes for the welfare of elderly persons.
* The awards are presented on 1st of October every year pursuant to the adoption of a resolution by the UN General Assembly to observe the year 1999 as the International Year of Older Persons.

**Paris agreement**

* India has ratified the Paris Agreement on climate change on the 147th birth anniversary of Mahatma Gandhi.
* India became 62nd country to ratify the agreement.
* The Paris Agreement on climate change will enter into force one month after 55 countries that account for 55% of global GHG emissions ratify the agreement.

**New species of Pika**

* A new species of Pika, a mammal belonging to the rabbit and hare family (Lagomorpha ), has been discovered in the Himalayas in Sikkim.
* Pikas are members of the rabbit family and live in the mountains or in temperate regions. The common name “pika” is used for any member of the Ochotonidae family.
* Pikas do not hibernate unlike other mammalian species inhabiting such cold climates.

**Management of Haj Pilgrimage**

* Following President Pranab Mukherjee’s assent to amendments to the Government of India (Allocation of Business) Rules, 1961, the Centre has transferred the management of Haj Pilgrimage, including administration of the Haj Committee Act, 1959, to the Minorities Affairs Ministry.
* The Ministry of External Affairs has dealt with the Haj pilgrimage and other aspects earlier;
* Under the amended business rules, the Ministry would however, continue to oversee other pilgrimages to places outside India under the Indian Pilgrimships Rules, 1933, and pilgrim parties from India to shrines in Pakistan and vice versa.

**Insights Daily Current Affairs, 04 October 2016**

**Delhi tops most polluted megacity list**

According to WHO, Delhi’s air is the worst among world megacities.

Key facts:

* The data show that fine-particulate-matter (PM2.5) levels were almost four times above daily safe levels, on average, for the seven-day period from September 22 to 28, 2016. For long-term exposure, these 24-hour levels are nearly 11 times above the WHO health standards.
* Over the monsoons, Delhi’s air was relatively cleaner because the rain and wind diminished the impact of pollutants. But with the season changing, air-quality also diminished, meaning prolonged exposure affects healthy people and “seriously impacts” those with existing disease.
* Delhi recorded a PM10 level of 229 µg/m³, followed by Cairo with 179 µg/m³ and Dhaka with 158 µg/m³ – the top three megacities with the most polluted air globally. Beijing and Shanghai were sixth and seventh on that list.
* Delhi was the only megacity to record a PM10 level above 200 µg/m³, exceeding the WHO air quality standard of 20 µg/m³ by more than 900%. Beijing and Shanghai reported ambient air pollution levels of 108 and 84 µg/m³ respectively.
* Within India, the smaller cities of Gwalior and Allahabad measured the worst levels of ambient air pollution at PM2.5 levels of 176 µg/m³ and 170 µg/m³ respectively. A significant portion of northern India falls in a zone with “critical” air pollution-reporting PM2.5 levels of over 70 µg/m³ in the WHO’s mapping of air pollution and population.

What’s the concern?

In 2012, with one million deaths, China reported the highest toll from PM2.5 and PM10 pollution. At the time, India followed, reporting 621,138 deaths, nearly 10% of the global toll (6.5 million deaths) associated with outdoor and indoor air pollution.

However, between 2011 and 2015, in a comparison of megacities with population above 14 million, Delhi’s ambient air-pollution levels were worse than Beijing and Shanghai.

WHO guidelines:

The WHO guideline for annual mean levels for PM10 is 20 µg/m³ and for PM2.5 is 10 µg/m³. For 24 hours, the levels should not exceed 50 µg/m³ (for PM10) and 25 µg/m³ (for PM2.5).

Why exposure to PM 10 is not good?

* It is because most air-pollution deaths are caused by fine, invisible particles, called PM2.5, about 30 times finer than a human hair.
* These pollutants, if inhaled deep into the lungs, can cause-
  + heart attacks,
  + strokes,
  + lung cancer
  + respiratory diseases,
* PM10, or coarse particulate matter with diameter between 2.5 and 10 micrometers, are primarily made up of dirt and dust from farming, factories and roads, and caused due to the crushing of rocks and soil.

Sources: et.

*Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.*

**Centre constitutes Insolvency and Bankruptcy Board**

The Centre has constituted a four-member Insolvency and Bankruptcy Board of India (IBBI) under the Chairmanship of MS Sahoo.

Key facts:

* The oath of office was administered by Finance and Corporate Affairs Minister Arun Jaitley.
* Sahoo is appointed as IBBI Chairman for a period of five years.

Way ahead:

While the Centre has for now set up the IBBI with four members, going forward this will be expanded to 10 (including the Chairman). Three whole-time members and two other members are to be appointed.

Background:

* Insolvency and Bankruptcy Code 2016 seeks to establish the Insolvency and Bankruptcy Board of India, to oversee insolvency resolution in the country.
* The Board will have 10 members, including representatives from the central government and Reserve Bank of India.
* It will register and regulate the functioning of –
  + information utilities,
  + insolvency professionals and insolvency professional agencies.

**Nobel Prize in Medicine awarded to Yoshinori Ohsumi**

The [2016 Nobel Prize in Physiology or Medicine](https://www.nobelprize.org/nobel_prizes/medicine/laureates/2016/press.html?ctkey=autophagy) has been awarded to Yoshinori Ohsumi “for his discoveries of mechanisms for autophagy.” The professor is currently at the Tokyo Institute of Technology.

* Ohsumi is a cell biologist. He discovered and elucidated mechanisms underlying autophagy, a fundamental process for degrading and recycling cellular components. He received the Kyoto Prize for Basic Science in 2012.

Background:

The 1974 Medicine laureate, Christian de Duve, coined the term autophagy (meaning “self eating”) in 1963. This concept emerged during the 1960s, when researchers first observed that the cell could destroy its own contents by enclosing it in membranes, forming sack-like vesicles that were transported to a recycling compartment, called the lysosome, for degradation.

What is Autophagy?

Autophagy is essentially the body’s internal recycling program – scrap cells are hunted down and the useful parts are stripped out to generate energy or create new cells.

It is a crucial process to prevent cancerous growths, and, by maintaining a healthy metabolism, helps protect against conditions like diabetes.

Contributions of Yoshinori Ohsumi:

Difficulties in studying the phenomenon meant that little was known until, in a series of brilliant experiments in the early 1990’s, Yoshinori Ohsumi used baker’s yeast to identify genes essential for autophagy. He then went on to elucidate the underlying mechanisms for autophagy in yeast and showed that similar sophisticated machinery is used in our cells.

Ohsumi’s discoveries led to a new paradigm in our understanding of how the cell recycles its content. His discoveries opened the path to understanding the fundamental importance of autophagy in many physiological processes, such as in the adaptation to starvation or response to infection.   
Mutations in autophagy genes can cause disease, and the autophagic process is involved in several conditions including cancer and neurological disease.

**Centre accepts pay panel recommendation on promotion**

The Union government has accepted the recommendation of the 7th Pay Commission on Modified Assured Career Progression (MACP) for Central employees.

Key facts:

* There shall be three financial upgradations under the assured promotion scheme counted from the direct entry grade on completion of 10, 20 and 30 years services respectively or 10 years of continuous service in the same level in Pay Matrix, whichever is earlier. This would ensure one minimum promotion for every 10 years till 30 years of service.
* MACP envisages mere placement in the immediate next higher level in the Pay Matrix. Thus in certain cases where regular promotion is not between two successive levels in the Pay Matrix, it will be different than what is available at the time of regular promotion. In such cases, the higher level in the Pay Matrix attached to the next promotion post in the hierarchy of the concerned cadre/organisation will be given only at the time of regular promotion.

Background:

The Modified Assured Career Progression Scheme was originally introduced in 2008 following the recommendations of the Sixth Pay Commission.

**Facts for Prelims**

**Regional Anti-Dumping Workshop**

* Regional Anti-Dumping Workshop for Asian Investigating Authorities was recently held in Delhi.
* The Workshop organised by the World Trade Organisation and the Centre for WTO Studies, Indian Institute of Foreign Trade brings together 37 senior officials from 18 investigating authority systems.
* Senior experts from developing countries in the Asian region, along with select developed countries like Australia, Canada, the EU, Japan and the United States participated in the workshop.
* The Workshop aims to assist Asian developing WTO Members’ investigating authorities to further enhance their technical capacity to conduct anti-dumping investigations in a fair and efficient manner, in conformity with WTO rules.

**DBT in kerosene**

-About

• After the success of Direct Benefit Transfer (DBT) in LPG/Cooking gas, the government is planning to launch DBT in Kerosene as well.

• It has initiated the process by a pilot programme in 4 districts of Jharkhand.

• Under the DBTK Scheme, PDS kerosene is being sold at non-subsidised price, and, subsidy, as admissible, is being transferred to consumers directly into their bank accounts.

• This initiative of the governments is aimed at rationalising subsidy, cut subsidy leakages and reduce administrative costs. It, thus, seeks to benefit all stakeholders.

-Challenges in Implementation

• Lack of a streamlined and unified digital consumer database: The LPG consumers were all under Public Sector Oil marketing companies which made it easier to compile a consumer data. However, in case of Kerosene the consumer data is with individual states under their PDS system. Thus, coordination among the large number of State-level actors, especially in the case of a non-digitised PDS beneficiary database, can create barriers.

• Differences between center and states: While the Centre bears the fiscal impact of subsidy, the States determine the beneficiaries and quantum of subsidy. This is an important political currency for State governments. Thus, states must be aligned to this idea for its successful implementation.

• The price difference between diesel and unsubsidized kerosene will still be high enough to give an incentive to the middlemen to divert the fuel as a diesel substitute.

• Another challenge is in ensuring that the subsidy is accessible to its major beneficiaries- poor households. Presently, the bank branches are not readily available in remote locations which increase the cost of withdrawing money.

-Way Forward

• Studies show that kerosene is predominantly used as a lighting fuel in rural India, with less than 1 per cent of households using it as a primary cooking fuel.

• Thus, there is need to move towards solar-assisted solutions for lightening and LPG for cooking`. This would be economically beneficial to government as well as households in the long-run.

Mains 2015 Q. In what way could replacement of price subsidy with Direct Benefit Transfer (DBT) change the scenario of subsidies in India? Discuss

**Insights Daily Current Affairs, 05 October 2016**

**Indian Bridge Management System**

• The Indian Bridge Management System was launched recently.

• IBMS is being developed to create an inventory of all bridges in the country and rate their structural condition so that timely repair and rehabilitation work can be carried out based on the criticality of the structure.

• This will help in improving the transport efficiency as well as reducing accidents.

Working Mechanism

• Every bridge in the country is assigned a unique National Identity Number based on the state and RTO zone. It is also given a Bridge Location number based on its exact location which is ascertained by GPS.

• The Bridges are also classified according to their engineering characteristics and structural components and assigned a Bridge Classification and Structural Rating Number respectively.

• The bridges are also being assigned Socio-Economic Bridge Rating Number which will decide the importance of the structure in relation to its contribution to daily socio-economic activity of the area in its vicinity.

• Based on this inventory IBMS will analyse data and identify bridges that need attention.

What is it?

IBMS is being developed to create an inventory of all bridges in the country and rate their structural condition so that timely repair and rehabilitation work can be carried out based on the criticality of the structure.

IBMS is the largest platform in the world owned by a single owner, with database that could exceed 1,50,000 bridge structures. So far 1,15,000 bridges have been inventorized, of which 85,000 are culverts and the rest are bridges.

Why was it necessary?

Lack of any data base on bridges in the country has led to a situation where there is no clear idea about the exact number and location of bridges. Hence, it has become difficult to maintain bridges in proper working condition. Poor condition of bridges hampers efficient transport and has also led to accidents and loss of lives on several occasions.

**Certificates of Appreciation to the Ministries/ Departments for their performance in CPGRAMS**

Certificates of Appreciation were recently awarded to the Ministries/Departments based on their performance in the Centralized Public Grievance Redress and Monitoring System (CPGRAMS).

* From each category one Ministry/Department is selected for issue of Certificate of Appreciation based on the parameters of percentage of disposal and quality of disposal.
* A three member Committee evaluates the performance for each quarter.

What is CPGRAMS?

* The CPGRAMS is an online web enabled application to facilitate speedy redress of public grievances as it allows for online lodging and status tracking of grievances by the citizens.
* The system is flexible enough to be extended to multiple levels as per the requirement of concerned Ministry/Department/ Govt. Organization for speedy forwarding and redress of grievance.
* With this, the Government aims to have minimum Government and maximum Governance with citizen centric approach.
* The Public Grievance Portal has evolved during the last few years aiming at the following objectives:
  + To serve as a platform for dissemination of information related to Public Grievances and to monitor the redress of these Grievances.
  + To enable the citizen to lodge and keep track of the status of his/her grievance online.
  + To enable Ministries/Departments/Organisations to scrutinize and take action without delay.
  + To reduce/eliminate physical forwarding of complaints to the Ministries/Departments Concerned.

*Paper 1 Topic: Modern Indian history from about the middle of the eighteenth century until the present- significant events, personalities, issues.*

**PM remembers Shyamji Krishna Varma on his birth anniversary**

Birth anniversary of Shyamji Krishna Varma was celebrated on 4th October.

Shyamji Krishna Varma- Key facts:

* Shyamji Krishna varma was an Indian revolutionary fighter, lawyer and journalist.
* He founded the
  + Indian Home Rule Society,
  + India House
  + The Indian Sociologist in London.
* An admirer of Dayanand Saraswati’s approach of cultural nationalism, and of Herbert Spencer, Krishna Varma believed in Spencer’s dictum: “Resistance to aggression is not simply justified, but imperative”.
* The India House and The Indian Sociologist rapidly developed as an organised meeting point for radical nationalists among Indian students in Britain at the time and one of the most prominent centres for revolutionary Indian nationalism outside India. Most famous among the members of this organisation was Veer Savarkar.
* Shyamji Krishan was also an admirer of Lokmanya Tilak and supported him during the Age of Consent bill controversy of 1890. However, he rejected the petitioning, praying, protesting, cooperating and collaborating policy of the Congress Party.

**Physics Nobel shared by three, one half by one and the other by two**

Given for “theoretical discoveries of topological phase transitions and topological phases of matter.”

Three physicists have been awarded the [Nobel Prize in Physic](https://www.nobelprize.org/nobel_prizes/physics/laureates/2016/press.html)s for rewriting our understanding of exotic quantum states on the surfaces of materials.

Their work explains the behavior of superconductors and superfluids by connecting these systems to topology, the mathematical study of spatial properties including surfaces.

* Half of the prize goes to David J. Thouless, a physicist at the University of Washington in Seattle, while the other half will be split between J. Michael Kosterlitz, a physicist at Brown University, and F. Duncan M. Haldane, a physicist at Princeton University.

What is topology?

Topology is a branch of math that studies what properties are preserved when objects are stretched, twisted, or deformed.

It is referred to as the modern version of geometry

The scientists studied different phases (such as solid, liquid and gas) of different materials. These phases were characterized using topology

Significance

• The study is being applauded as the meeting point of topology and phase transitions.

• It will help make the study of phase transitions easier.

**Maharashtra to be on the crest of science**

Maharashtra State Cabinet has decided to hand over 40.68 hectare government land to the Atomic Energy Department to build the Laser Interferometer Gravitational Wave Observatory Project (LIGO India Project) at Dudhala village in Hingoli district.

Key facts:

* In April this year, India and United States had signed an MoU to set up the LIGO Observatory that recently proved the existence of gravitational waves envisaged by Albert Einstein nearly a century ago.
* With this project, India will join an elite league of countries that support research on gravitational waves. Besides the U.S, U.K, Italy, Germany and Japan have ongoing research in the area.
* The two current LIGO Observatories are located at Hanford, Washington, and Livingston, Louisiana, and are operated by Caltech and MIT.
* The LIGO project is run with the collaboration of 90 universities and research institutions. Thirty people of Indian origin are part of the LIGO project.

Background:

The proposed LIGO-India project aims to move one Advanced LIGO detector from Hanford to India. LIGO-India project is envisaged as an international collaboration between the LIGO Laboratory and three lead institutions in the IndIGO consortium: Institute of Plasma Research (IPR) Gandhinagar, Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune and Raja Ramanna Centre for Advanced Technology (RRCAT), Indore.

* LIGO lab would provide the complete design and all the key detector components. Indian scientists would provide the infrastructure to install the detector at a suitable site in India and would be responsible for commissioning it.
* The proposed observatory would be operated jointly by IndIGO and the LIGO-Lab and would form a single network along with the LIGO detectors in USA and Virgo in Italy.

Sources: the hindu.

**Facts for Prelims**

**Sagar Port Project**

* The Central Government has given in principle approval to a grant of Rs. 515 crores to make the development of the proposed Sagar Port project in West Bengal financially viable
* It is a proposed Rs. 12,000 crore deep sea port at Sagar islands in West Bengal.
* The Kolkata and Haldia ports cannot handle big ships due to the shallow depth of the Hooghly River. Thus, an alternative port in West Bengal is needed.
* A road-cum-rail bridge is proposed over the river Muriganga to connect the Sagar island to the mainland.

Where is it?

* Sagar island is an island in the Ganges delta, lying on the continental shelf of Bay of Bengal about 100 km south of Kolkata.
* Who administers it? It comes under South 24 Parganas District in West Bengal. It is governed by the

**SBI branch in Myanmar**

* State Bank of India (SBI) has announced the opening up its foreign branch in Yangon, the capital city of Myanmar.
* With this, SBI became the first domestic bank of India to open a branch in Myanmar.
* The Yangon branch is the 54th foreign branch of the SBI.
* This branch extends the global presence of India’s largest lender in 37 countries through 198 offices.

**Insights Daily Current Affairs, 06 October 2016**

**Cabinet approves MoU between India and European Union on water cooperation**

The Union Cabinet has given its approval for the signing of MoU between India and European Union in the field of water resources.

Key facts:

* The MoU envisages strengthening the technological, scientific and management capabilities of India and the European Union in the field of water management on the basis of equality, reciprocity and mutual benefit.
* It provides technical exchange on water issues, including on integrated water resource management plans within river basins and through study visits.
* The MoU aims to identify key environmental issues and approaches to sustainable development where exchange of experiences and cooperation could be mutually beneficial to strengthen and further develop cooperation between India and the European Union in the field of water management.
* It envisions a more sustainable management of water resources in India with an objective of tackling the challenges posed by water management in the context of growing population, competing water demands and a changing climate.
* A Joint Working Group is also proposed to be formed to monitor the activities to be carried out in fulfillment of the MoU.

Background:

The Ministry of Water Resources, River Development and Ganga Rejuvenation has been envisaging bilateral cooperation with other countries in water resources development and management through sharing of policy and technical expertise, conducting of training courses, workshops, scientific and technical symposia, exchange of experts and study tours.

The EU States have adopted water pricing policies to provide adequate incentives for users to use water resources efficiently thereby contributing to environmental objectives.

Sources: pib.

*Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India’s interests.*

**Memorandum of Understanding with AARDO**

The Union Cabinet has given its approval to the signing of a Memorandum of Understanding (MoU) between India and the African Asian Rural Development Organization (AARDO) for capacity building programmes in the field of rural development.

Key facts:

* The MoU for the triennium 2015 – 2017 is being signed under which capacity building programmes for AARDO member countries will be organized every year during the triennium at various Institutions of Excellence in India such as National Institute of Rural Development & Panchayati Raj (NIRD & PR), institutions governed by the Indian Council of Agricultural Research (ICAR), Indian Institute of Management (IIM) and others.
* The duration of each training programme shall be of two to three weeks. The Post Graduate Diploma in Rural Development Management Course at NIRD & PR under this scheme is for one year.

About AARDO:

The AARDO, which has its headquarters in New Delhi, is an autonomous, inter-Governmental organization established in 1962 with the objective of promoting cooperation among the countries of the African – Asian Region in the direction of eradicating thirst, hunger, illiteracy, disease and poverty in the region. AARDO currently has 31 countries of the African – Asian Region under its fold.

India and AARDO:

India is one of the Founder Members of the Organization and is the largest contributor in terms of membership contribution of US$ 141,100 apart from contributing by way of providing 70 fully paid training scholarships for Human Resource Development Programme under the Indian Technical & Economic Cooperation Programme (ITEC) to the Organization.

* India has also provided a building for housing the AARDO Secretariat in Delhi and considerable financial assistance is given to AARDO for maintenance of the building.
* Since the year 2009, India is continuing to provide an Additional Contribution of US$ 600,000 to AARDO for each triennium 2009-2011 to expand its scale and scope of the Capacity Building Programmes of AARDO for the benefit of Member Countries.

**Cabinet approves amendments to the HIV and AIDS (Prevention and Control) Bill, 2014**

The Union Cabinet has approved the amendments to the HIV and AIDS (Prevention and Control) Bill, 2014. This comes after the NDA government in July revived the bill to look into its flaws.

* The Bill was first introduced in Parliament by the UPA government in its last days in 2014 and aimed to make anti-retroviral treatment a legal right of HIV/AIDS patients.
* The HIV and AIDS Bill, 2014 has been drafted to safeguard the rights of people living with HIV and affected by HIV.

Key provisions in the bill:

The provisions of the Bill seek to address HIV-related discrimination, strengthen the existing programme by bringing in legal accountability and establish formal mechanisms for inquiring into complaints and redressing grievances.

Role of governments:

* Under the Bill, central and state governments are obliged to provide for anti-retroviral therapy (ART) and management of opportunistic infections (infections that take advantage of weakness in the immune system and occur frequently).
* The bill also prohibits specific acts of discrimination by the state, or any other person, against HIV-positive people, or those living with such people.

Provisions related to discrimination:

* The Bill lays down penal provisions for any discrimination practised against a person with HIV/AIDS and breach of confidentiality.
* The protection mandated in the Bill extends to the fields of employment, healthcare services, educational services, public facilities, property rights, holding public office, and insurance.
* It also provides for confidentiality of HIV-related information and makes it necessary to get informed consent for undertaking HIV tests, medical treatment and research.

Provisions related to ombudsman:

* The bill also provides for an ombudsman. According to the provisions of the Bill, an ombudsman shall be appointed by each state government to inquire into complaints related to the violation of the Act and the provision of health care services.
* The ombudsman shall submit a report to the state government every six months stating the number and nature of complaints received, the actions taken and orders passed.

Provisions related to guardianship:

* Provisions related to guardianship are also specified. A person between the age of 12 to 18 years who has sufficient maturity in understanding and managing the affairs of his HIV or AIDS affected family shall be competent to act as a guardian of another sibling below 18 years of age.
* The guardianship will apply in matters relating to admission to educational establishments, operating bank accounts, managing property, care and treatment, amongst others.

Role of courts:

* Cases relating to HIV positive persons shall be disposed off by the court on a priority basis.
* In any legal proceeding, if an HIV infected or affected person is a party, the court may pass orders that the proceedings be conducted (a) by suppressing the identity of the person, (b) in camera, and (c) to restrain any person from publishing information that discloses the identity of the applicant.
* When passing any order with regard to a maintenance application filed by an HIV infected or affected person, the court shall take into account the medical expenses incurred by the applicant.

Background:

There are approximately 21 lakh persons estimated to be living with HIV in India and the percentage of patients receiving antiretroviral therapy (ART) treatment currently stands at a mere 25.82% as against the global percentage of 41%, according to the 2015 Global Burden of Diseases (GBD).

Sources: pib.

*Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.*

**Automation threatens 69% jobs in India: World Bank**

According to a World Bank research, automation threatens 69% of the jobs in India, while 77% in China.

Highlights of the research:

* The research paper has said that technology could fundamentally disrupt the pattern of traditional economic path in developing countries.
* Technology has and will continue to fundamentally reshape the world. But the traditional economic path from increasing productivity of agriculture to light manufacturing and then to full-scale industrialisation may not be possible for all developing countries.
* In large parts of Africa, it is likely that technology could fundamentally disrupt this pattern.

Way ahead:

Developing countries are going to lose many jobs due to technological development. Therefore, it is necessary to understand what paths to economic growth will be available for these countries and then adapt our approach to infrastructure accordingly.

**UN court rejects disarmament case against India**

The United Nations’ highest court has rejected nuclear disarmament cases filed by the Pacific nation of the Marshall Islands against Britain, India and Pakistan, saying it did not have jurisdiction.

What has the court said?

The International Court of Justice ruled that the Marshall Islands had failed to prove that a legal dispute over disarmament existed between it and the three nuclear powers before the case was filed in 2014, and that “consequently the court lacks jurisdiction.”

What was the case about?

The Marshall Islands had sued India, Pakistan and Britain, and had sought to persuade the UN’s highest court to take up a lawsuit, accusing the countries of failing to halt the nuclear arms race.

Background:

* In 2014, the Marshall Islands – a Pacific Ocean territory with 55,000 people – accused nine countries of “not fulfilling their obligations with respect to the cessation of the nuclear arms race at an early date and to nuclear disarmament”. They included China, Britain, France, India, Israel, North Korea, Pakistan, Russia and the United States.
* Eight of the nine countries originally targeted in the lawsuits have officially admitted to possessing a nuclear weapon. Israel has never acknowledged having one, though observers believe it is the sole nuclear-armed nation in the Middle East.
* The government, based in the Marshall Islands capital of Majuro, said by not stopping the nuclear arms race, the countries continued to breach their obligations under the Nuclear Non-Proliferation Treaty (NPT) – even if the treaty has not been signed by countries such as India and Pakistan.
* The Marshall Islands government says it had decided to sue the world’s nuclear heavyweights as it has a particular awareness of the dire consequences of nuclear weapons. Between 1946 and 1958 the United States conducted repeated nuclear tests in the Marshall Islands.

In March 2014 the Marshall Islands marked 60 years since the devastating hydrogen bomb test at Bikini Atoll that laid waste on the island and exposed thousands in the surrounding area to radioactive fallout. The 15-megatonne test on 1 March, 1954 was part of the intense cold war nuclear arms race and 1,000 times more powerful than the atomic bomb dropped on Hiroshima.

Arguments for Nuclear disarmament

• Strategic excuse, most nations equipped with nuclear weapons claim that they rely on them for strategic defense, and they are vulnerable to various attacks without these destructive weapons which is not true in multipolar world.

• Economically, nuclear weapons programs divert public funds from health care, education, disaster relief and other vital services. It is time to redirect money towards meeting human needs.

• Environmentally, nuclear weapons are the only devices ever created that have the capacity to destroy all complex life forms on Earth.

• Security concerns, nuclear weapons pose a direct and constant threat to people everywhere. Far from keeping the peace, they breed fear and mistrust among nations.

• Humanitarian Issues, the abolition of nuclear weapons is an urgent humanitarian necessity. Any use of nuclear weapons would have catastrophic consequences.

• Nuclear Terrorism – There is danger that nuclear weapons in politically unstable countries like Pakistan or Russia may fall into the hands of rogue terrorist elements.

India’s Stand on Nuclear disarmament

India attaches the highest priority to nuclear disarmament and shares common concerns with the co-sponsors, that the international community has not been able to take forward multilateral nuclear disarmament negotiations.

Way Forward

• Nuclear disarmament will create moral suasion for nuclear weapons states to disarm, and establish an international norm prohibiting nuclear weapons’ development, possession and use.

• The states having nuclear weapons should participate fully in the negotiations to come out with a better policy formulation for the world.

**Nobel Prize in Chemistry goes to builders of molecular machines**

[The Nobel Prize in Chemistry for 2016 has been awarded to Jean-Pierre Sauvage, Sir J. Fraser Stoddart and Bernard L. Feringa for developing molecular machines](https://www.nobelprize.org/nobel_prizes/chemistry/laureates/2016/press.pdf).

Key facts:

* The 2016 Nobel laureates in Chemistry have miniaturised machines and taken chemistry to a new dimension.
* They have developed molecules with controllable movements, which can perform a task when energy is added.
* The development of computing demonstrates how the miniaturisation of technology can lead to a revolution.
* These molecular machines will most likely be used in the development of things such as new materials, sensors and energy storage systems.

What are Molecular Machines?

Molecular machines are single-molecules that behave much like the machines people encounter every day: They have controllable movements and can perform a task with the input of energy.

Examples include a tiny elevator that goes up and down with changes in pH and a super-small motor that spins in one direction when exposed to light and heat.

-they are 1000 times thinner than hair;

-the machines are formed from mechanically interlocked ring-shape molecules, which are able to move relative to each other;

**Facts for Prelims:**

* BRICS U-17 Football Tournament: India is hosting the first BRICS U-17 Football Tournament. It is being held in Goa. The BRICS U – 17 Football Tournament will be played among the ‘BRICS’ countries Brazil, Russia, India, China and South Africa

**Insights Daily Current Affairs, 07 October 2016**

**Rs.114 cr worth projects HRIDAY projects approved**

Ministry of Urban Development has approved projects worth Rs.114 cr under Heritage Infrastructure Development and Augmentation Yojana (HRIDAY) for improving infrastructure facilities around core heritage sites in five cities of Varnasi, Amritsar, Dwaraka, Puri and Warangal.

* The approval in this regard was given by an inter-Ministerial HRIDAY National Empowered Committee.

About HRIDAY:

The National Heritage Development and Augmentation Yojana (HRIDAY) aims to preserve and rejuvenate the rich cultural heritage of the country.

Key facts:

* It seeks to promote an integrated, inclusive and sustainable development of heritage sites, focusing not just on maintenance of monuments but on advancement of the entire ecosystem including its citizens, tourists and local businesses.
* Central government will meet the entire expenditure under the scheme. But, the states and local urban bodies are requested to supplement their resources for rapid development of heritage cities.
* The project will work through a partnership of Government, Academic Institutions and local community combining affordable technologies.
* The 12 cities selected for the scheme are-
  + Ajmer, Amritsar, Amravati,
  + Badami,
  + Dwarka,
  + Gaya;
  + Kanchipuram,
  + Mathura,
  + Puri
  + Varanasi and Velankanni.
  + Warangal;

With 32 UNESCO recognized natural and cultural heritage sites, ranking second in Asia and fifth in the world, the tourism potential of the country is still to be fully harnessed and this scheme will help in this regard.

**India to host first AMCDRR after Sendai Framework**

The Government of India is hosting the Asian Ministerial Conference for Disaster Risk Reduction (AMCDRR) next month in collaboration with the United Nations Office for Disaster Risk Reduction (UNISDR). The hosting of the Conference re-affirms India’s commitment to the cause of Disaster Risk Reduction.

Key facts:

* This is the first AMCDRR after the advent of the Sendai Framework for Disaster Risk Reduction (SFDRRR), adopted at the third UN World Conference in Sendai, Japan in March, 2015. It will set the direction of Sendai Framework implementation in the region.
* AMCDRR 2016 will focus on collaboration, consultation and partnership with governments and stakeholders to mainstream DRR in the region’s development narrative.
* The Conference will adopt the ‘Asian Regional Plan for Implementation of the Sendai Framework’ endorsed by the Asian countries.
* It will also consolidate the political commitment of governments towards preventing and reducing risk as well as strengthening resilience in the form of a political declaration.
* Voluntary statements of action of stakeholder groups towards a ‘shared responsibility’ approach in implementation of the SFDRR would also be adopted.

Background:

Established in 2005, AMCDRR is a biennial conference jointly organized by different Asian countries and the UNISDR. So far, six AMCDRR conferences have been organised. India had also hosted the second AMCDRR in New Delhi in 2007.

About Sendai Framework:

The “Sendai Framework for Disaster Risk Reduction 2015-2030” was adopted during the Third UN World Conference on Disaster Risk Reduction held in Sendai, Japan in March, 2015.

* It is the first major agreement of the post-2015 development agenda, with seven targets and four priorities for action.
* It was endorsed by the UN General Assembly following the 2015 Third UN World Conference on Disaster Risk Reduction (WCDRR).
* The Framework is for 15-year. It is a voluntary and non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.
* The new Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters.
* The implementation of the Sendai Framework involves adopting integrated and inclusive institutional measures so as to work towards preventing vulnerability to disaster, increase preparedness for response and recovery and strengthen resilience.

The Seven Global Targets:

* Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality rate in the decade 2020-2030 compared to the period 2005-2015.
* Substantially reduce the number of affected people globally by 2030, aiming to lower average global figure per 100,000 in the decade 2020 -2030 compared to the period 2005-2015.
* Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.
* Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
* Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
* Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.
* Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

The Four Priorities for Action under the Framework:

* Understanding disaster risk.
* Strengthening disaster risk governance to manage disaster risk.
* Investing in disaster risk reduction for resilience.
* Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Sources: pib.

*Paper 3 Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.*

**GSAT-18, ISRO’s latest communication satellite, launched successfully**

 -GSAT Satellites - These satellites are India’s indigenously developed technologies of communications satellites used for digital, audio, data and video broadcasting.

-GSAT -18

• India’s latest communication satellite, GSAT 18 was successfully launched from the spaceport of Kourou in French Guiana, South America.

• It is been built by ISRO and ISRO’s Master Control Facility at Hassan, Karnataka is controlling the satellite.

• The Master Facility will also perform the initial raising manoeuvres using the Liquid Apogee Motor (LAM) of the satellite, placing it in a circular Geostationary Orbit.

-Challenges

India does not have any launcher capable of carrying heavier satellites like GSAT-18. However, Indian scientists are developing GSLV –III to overcome the challenge.

**Adoption of GST poised to boost India’s medium-term growth: IMF**

Asserting that India has shown that progress on reforms could “ignite” business investment, the IMF has, in its latest Asia Pacific regional economic update, said the adoption of goods and services tax is poised to boost the country’s medium-term growth.

Important observations made:

* Over the medium term, a number of Asian economies stand to benefit from a demographic dividend, as the working-age population in some economies like India and Indonesia continues to grow, potentially helping sustain strong potential growth.
* In India, monsoon rainfall coming in at normal levels bodes well for agriculture and, along with a decennial rise in government employee salaries, will underpin the ongoing recovery in domestic demand.
* Further progress on reforms will boost sentiment, and the incipient recovery of private investment is expected to help broaden the sources of growth amid gradual fiscal consolidation and broadly neutral monetary policy.
* India’s growth has continued to benefit from the large improvement in the terms of trade, positive policy actions, including implementation of key structural reforms, gradual reduction of supply-side constraints, and a rebound in confidence.
* Consumption growth has remained strong and activity in core industrial sectors has picked up. Government consumption is set to continue to support growth in 2016, it noted.

Way ahead for India:

Greater labour market flexibility and product market competition remain essential to create jobs and raise growth. Priorities also include effective implementation of the new corporate debt restructuring mechanisms.

**Centre plans to set up Board of Internal Trade**

The Commerce and Industry Ministry is planning to set up a Board of Internal Trade to address all the issues pertaining to domestic trade. The board was initially proposed by the Confederation of All India Traders.

Need for such a board:

In a large and diverse market like India, internal trade has several issues that will need special attention. The government, through such a Board, will benefit from getting alerts about the problems being faced by the domestic industry.

Who will monitor the board?

The board will be set up under a single ministry — the Commerce and Industry Ministry.  This is necessary as currently internal trade comes under the ambit of multiple ministries leading to delays in addressing their issues.

Sources: the hindu.

**250 agri markets integrated with online platform surpassing target: Minister**

The Centre has integrated 250 regulated agricultural markets across 10 States to the online trading platform for agriculture produce, e-NAM, surpassing the target of 200 set for the period.

* Commodities worth ₹421 crore have already been traded on the platform and more than 1,60,000 farmers and 46,888 traders have got themselves registered.
* The Agriculture Ministry had set a target of connecting all 585 mandis to the e-platform by March 2018.

E-NAM:

E-NAM, or the National Agriculture Market, is a pan-India electronic portal for the sale and purchase of agricultural produce launched in April this year.

* The idea behind the online market is to reduce the transaction cost, provide a single licence valid across all markets, help farmers identify the best buyers, enable single point levy of market fees and maintain quality standards with provision for quality testing.
* About 69 agricultural and horticultural commodities, including fruits and vegetables are notified for trading on the e-NAM platform.

**RBI to be divested of debt management role in 2 years: PDMA**

The Finance Ministry has set up a Public Debt Management Cell (PDMC).

-What is it?

• It is an interim arrangement and will be upgraded to a statutory Public Debt Management Agency (PDMA) in about two years.

• Its main purpose is to allow separation of debt management functions from RBI to PDMA in a gradual and seamless manner, without causing market disruptions.

• PDMC will have 15 experienced debt managers from Ministry and RBI for the required expertise.

• A joint implementation committee chaired by Joint secretary (Budget) will oversee the transition process of PDMC to PDMA. The JIC would in turn be supervised by the monitoring group on cash and debt management that would be co-chaired by Economic Affairs Secretary and RBI Deputy Governor.

- This move would help divest the RBI of its dual and often conflicting roles as the banker and manager of the Centre’s borrowing.

- About Public Debt Management Agency (PDMA)

• Public Debt Management Agency (PDMA) is a proposed specialized independent agency that manages the internal and external liabilities of the Central Government in a holistic manner.

• The government has now made clear that PDMA will be formed in 2 years.

-Need for PDMA

• Presently the market borrowing is managed by RBI but external debt by central government directly. Establishing a debt management office would consolidate all debt management functions in a single agency and bring in holistic management of the internal and external liabilities

• There is a severe conflict of interest in the RBI responsibility of setting the short term interest rate (i.e. the task of monetary policy) and selling bonds for the government. If the Central Bank tries to be an effective debt manager, it would lean towards selling bonds at high prices, i.e. keeping interest rates low. This leads to an inflationary bias in monetary policy.

• Management of government debt, regulation of banks and monetary policy are all interlinked which could be better coordinated by an agency like PDMA.

• Some functions that are crucial to managing public debt are not carried out. For instance, no agency undertakes cash and investment management, information relating to contingent and other liabilities are not consolidated. This will be taken care of by PDMA.

-Challenges

• In India sovereign debt management is not merely an exercise for resource mobilization but has a wider socio-economic impact. It thus requires a broader outlook which might not be given by an independent agency.

• PDMA’s focus is only on central government but RBI can harmonise the Debt management of both union and State governments

• The conflict of interest would still be present as government is the majority shareholder in PSBs.

-Functions of PDMC:

* The PDMC will at present only have advisory functions to avoid “any conflict” with the statutory powers of the RBI.
* To start with, it would plan the borrowings of the Centre, manage the Central government liabilities and monitor the cash balances.
* It would also develop an integrated debt database system as a centralised data base for all liabilities of the government on a near real time basis.
* It will also advise government on matters related to investment, capital market operations and interest rates on small savings as well as undertake requisite preparatory work for PDMA.

**Insights Daily Current Affairs, 08 October 2016**

**SC blocks BCCI funds to State units**

The Supreme Court has barred 25 State cricket associations from using BCCI funds till they accept the Justice Lodha Committee’s reforms in “letter and spirit.” The state associations are yet to get the balance payment of their share from nearly Rs. 2,500 crore the BCCI received towards compensation on account of termination of the Champions League T20 tournament.

What next?

The court has directed that the pending Rs. 16.73 crore and any future funds would be released only after the State associations passed resolutions undertaking to comply with the reforms. This has to be followed by filing affidavits declaring their compliance before both the Lodha panel and the Supreme Court. Also, 13 State associations, which have already received Rs. 16.73 crore, can only use the money after passing resolutions to implement the Lodha Committee reforms.

Background:

The committee headed by justice (retd) RM Lodha was appointed by the apex court last year in the wake of a sport-fixing scandal in IPL, the biggest crisis to hit the cash-rich sports body in the country.

* Ever since the sweeping reforms were proposed, BCCI have raised objections to several recommendations including: advertisements between overs during a match broadcast, ‘one state, one vote’, the presence of two members from IPL franchises on the league’s governing council, the formation of an apex council, and a cap on the tenure of the office bearers.
* BCCI is also accused of cherry-picking directives made by the supreme court- appointed Lodha panel. The BCCI’s refusal to accept the reforms has worsened the stand-off with the apex court and threatened to disrupt India’s most popular sport.

Important recommendations:

* One state, one cricket body: One association of each state will be a full member and have right to vote. One unit should represent one state.
* CEO-run organisation: Committee also suggested the restructuring of the BCCI’s administrative set-up, proposing the position of a CEO accountable to a nine-member apex council. An apex council for the BCCI comprising 9 members, of which 5 should be elected, 2 should be representatives of players association, and one woman. CEO to be assisted by 6 professional managers and the team of CEO and managers will be accountable to the apex council.
* Under RTI: To ensure transparency in its functioning, the panel has said that it is important to bring the body under the purview of the Right to Information Act.
* Ethics officer: The committee recommended the institution of the office of an Ethics Officer, who would be responsible for resolving issues related to the conflict of interest. Ethics officer would be a former High Court judge.
* Electoral officer: The committee has also suggested the appointment of an Electoral Officer to conduct the Board elections. The electoral officer would oversee the entire election process relating to the office-bearers namely, preparation of voters list, publication, dispute about eligibility of the office-bearers
* Ombudsman: The panel has also proposed an Ombudsman for dealing with internal conflicts. Ombudsman can take cognisance of complaints suo moto, or received complaint or referred complaint by the apex council.
* Among the most sensational recommendation by Lodha panel was the suggestion to legalize betting. The panel felt that the move would help curb corruption in the game and recommended that except for players and officials, people should be allowed to place bets on registered sites.
* The Panel also suggested that the grants given to state associations be properly monitored.
* It has also suggested that a person cannot be a BCCI office-bearer and a state association office-bearer at the same time.

**Polygamy no longer progressive, SC told**

Background

• The Supreme Court is presently hearing a case by Petitioner Shayara Bano who has challenged the constitutionality of Section 2 of the Muslim Personal Law (Shariat) Application Act, 1937, in so far as it seeks to recognise and validate polygamy, triple talaq and 'nikah halala'.

• The central government also got involved in the process as the Court had asked for its response on the matter.

• The Government, in its affidavit, supports the petition saying that these practices are not "integral to the practices of Islam or essential religious practices". Thus, they must be reformed keeping in light the rights of women.

About Triple Talaq & Nikal Halala:

• 'Talaq-e-bidat' is a Muslim man divorcing his wife by pronouncing more than one talaq in a single 'tuhr' (the period between two menstruations), or in a 'tuhr' after coitus, or pronouncing an irrevocable instantaneous divorce at one go i.e. unilateral triple-talaq.

• Nikah Halala is the temporary marriage a victim of instant talaq is forced to undergo with another man to remarry her first husband. This second marriage also needs to be consummated.

• The practice has been described as inhuman and uncivilized by social activists including many Muslim groups.

• The All India Muslim Personal Law Board (AIMPLB), however, has lent support to the practice saying that it is a way to save marriages. It says that the mandatory nature of Nikah halala deters the husband from giving hasty divorces. The argument, however, does not go down well with the activists who question the suffering and exploitation of women in the process.

• Further, the activists say that the practices are not of Islamic origin and many Islamic countries have abolished them.

• The practice of instant triple talaq has already been invalidated by the SC in 2002 in Shamim Ara case. By that decision Nikah Halala is also rendered redundant.

Feasibility of a total ban on Polygamy

• Census data and studies show that bigamy continues to prevail among the Hindus despite the Hindu Marriage Act, 1955 outlawing it, and Section 494 of the Indian Penal Code (IPC) declaring it a punishable offence.

• This is mainly due to the non-cognizable nature of s.494. It means that the police can take cognizance of the offence of bigamy only on a complaint by the victim i.e. the first wife in this case. This doesn’t always happen due to social norms, pressure and lack of awareness.

• The same problem would come in way of implementing anti-polygamy provisions in case of Muslims.

Way Forward

• Some Muslim groups perceive these reformative measures as an attempt to initiate Uniform Civil Code and impose majoritarianism on them. The government must alleviate these fears.

• The AIMPLB is against these reforms. However, it hasn’t been able to put convincing arguments in support of their stand.

• It must be kept in mind that gender equality is a sacred principle of our constitution and modern society. The present day situations are different from the times when these practices originated. It is, thus, the right time to make necessary changes.

**SC stays commercial release of GM mustard till Oct 17**

The Supreme Court has stayed the commercial release of the Genetically Modified (GM) mustard crop for 10 days and has asked the Centre to take public opinion on such seeds before releasing them for cultivation.

Background:

Mustard is one of India’s most important winter crops which is sown between mid-October and late November.

* The court is hearing a plea filed seeking a stay on the commercial release of GM Mustard crop and prohibition of its open field trials.
* The plea sought to prohibit open field trials and commercial release of Herbicide Tolerant (HT) crops, including HT Mustard DMH 11 and its parent variants.

GM crops in India:

The GM mustard in question—DMH-11—has been developed by the Centre for Genetic Manipulation of Crop Plants of Delhi University. If it gets the green light from the environment ministry’s GEAC, it will be the first GM food crop to be commercially cultivated in India. Right now, only GM cotton is allowed. GEAC is the environment ministry’s regulator for GMOs and transgenic products.

Sources: the hindu.

*Paper 3 Topic: infrastructure- energy.*

**Maharashtra becomes 17th State to join UDAY: an overall net benefit of Rs. 9725 crores to accrue to the State**

Government of India has signed a Memorandum of Understanding (MOU) with Government of Maharashtra and Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) under the Ujwal DISCOM Assurance Yojana (UDAY).

Key facts:

* Under UDAY, sixteen states/UT have already signed the MoU till date, Maharashtra being the seventeenth.
* The combined DISCOM debt, including Central PSU dues, that would be restructured in respect of these states is around Rs.2.57 lakh crores, which is around 68% of the total outstanding DISCOM debt as on 30th September, 2015.
* An overall net benefit of approximately Rs.9725 crores would accrue to Maharashtra by opting to participate in UDAY, by way of cheaper funds, reduction in AT&C losses, interventions in energy efficiency, coal reforms etc. during the period of turnaround.
* Under UDAY, Maharashtra Government has committed to take over 75% of DISCOM’s non-capex debt of around Rs.6600 crores during the current year. Balance 25% of such debt remaining with the DISCOM would be converted into Bonds or repriced at cheaper rates. This would reduce the interest burden of the State/DISCOM by Rs.595 crores.

About UDAY:

The UDAY scheme is aimed at bringing ailing power distribution companies (discoms) to a state of operational efficiency, with state governments taking over up to 75% of their respective discoms’ debt and issuing sovereign bonds to pay back the lenders.

UDAY envisages a permanent resolution of past as well as potential future issues of the sector The scheme seeks to achieve this through several simultaneous steps including reducing the interest burden on the discoms by allowing the states to take over the bulk of their debt, reducing the cost of power, and increasing the operational efficiencies of the discoms by providing capital and infrastructure like coal linkages.

Sources: pib.

**Facts for Prelims**

**New termite species discovered in Kerala**

* A new termite species, Glyptotermes Chiraharitae, has been discovered at Kakkayam in the Malabar Wildlife Sanctuary.
* The species are named ‘Chiraharitae’, after the tropical evergreen forests of the Western Ghats, where the termite was spotted.
* The flying adults of this species are approximately 10 mm long, while the soldiers are around 9.5 mm long.
* Termites are of three types — dry wood, damp wood, and subterranean. The new species are of the damp wood category, and they infest parts of woods with high moisture content, the decaying or rotting areas in particular.
* They are exclusively wood dwelling and do not require any contact with soil. Its relatives are known to attack mango, sal, banyan trees, Rhododendron, Artocarpus, silver oak, and jamun trees.

**Nobel Peace Prize**

Colombian President [Juan Manuel Santos](https://www.theguardian.com/commentisfree/2016/oct/07/nobel-peace-prize-juan-manuel-santos)has won the Nobel Peace Prize for his efforts in bringing to an end to 52 years of conflict with the Revolutionary Armed Forces of Colombia (FARC).

**Insights Daily Current Affairs, 10 October 2016**

**SC widens ambit of Domestic Violence Act**

• The Supreme Court has struck down the words “adult male” from the pertinent provision in the DV Act to lay down that a woman can also file a complaint against another woman, accusing her of domestic violence.

• Reasoning of Court

Since the perpetrators and abettors of domestic violence can also be women, insulating them would frustrate the objectives of the Act. Under this immunity females and minors can continue to commit domestic violence.

It discriminates between persons similarly situated and, thus, violates A.14 of the Constitution.

**Significance of the Change**

• It makes DV gender neutral which according to some experts (including the bench) would help in serving the purpose of the law in a better way.

• However, there are concerns from some corners that it would encourage husbands to file counter cases against their wives through their mothers or sisters.

• There are also apprehensions about putting juveniles under the Act. There is no criminal provision under DV Act and thus no question of dealing with juvenile Board.

• Relief under DV Act is almost always financial -maintenance, compensation and alternate residences – which can all be claimed only against an adult.

Background:

The ruling came on an appeal filed against a judgment of the Bombay High Court in 2014 that had read down the Act to hold that complaints could be filed against the women too. The top court, however, set aside this judgment on the ground that the provision could not be read down.

The domestic violence act came into force in 2005 to protect women from physical, sexual, verbal, emotional and economic abuse at home. Under the act, an offender can be prevented from selling his house or businesses or both to ensure the victim is not left to fend for herself.

**Janani Suraksha Yojana pays dividends: Study**

• A latest study conducted by researchers from NCAER says that JSY has –

* helped in reducing the socioeconomic inequalities
* led to an enhancement in the utilisation of health services among all groups especially among the poorer and underserved sections in the rural areas.

• The study was conducted using data from two rounds of the India Human Development Survey (IHDS) — conducted in 2004-05 and 2011-12, providing a before-after scenario for comparison.

• Three key services of maternal care were used for the analysis: full antenatal care (full ANC), safe delivery, and postnatal care

- About JSY

• The JSY was launched in 2005 as part of the National Rural Health Mission (NRHM) to improve maternal and neonatal health by promotion of institutional deliveries (childbirth in hospitals).

Janani Suraksha Yojana was launched in April 2005 by modifying the National Maternity Benefit Scheme (NMBS).

• JSY is a 100 % centrally sponsored scheme and it integrates cash assistance with delivery and post-delivery care.

• It is implemented through ASHA, the accredited social health activist, acting as an effective link between the Government and the poor pregnant women under this scheme.

- How it helps in Reducing Socio-Economic Disparities

* First, the increase in utilisation of all three maternal healthcare services between the two rounds was remarkably higher among illiterate or less educated and poor women.
* Secondly, the usage of all three maternal healthcare services by the OBC, Dalit, Adivasis and Muslim women increased between the surveys.
* There was generally a narrowing of the gap between the less educated and more educated women and between the poorer and richer women.

Background:

High incidence of maternal mortality continue to plague India. As per the latest Lancet series on maternal health, India accounted for 15% of the total maternal deaths in the world in 2015 — second only to Nigeria — with 45,000 women dying during pregnancy or childbirth.

**India’s first international arbitration centre**

The Mumbai Centre for International Arbitration (MCIA), India’s first international arbitration centre, was recently inaugurated in Mumbai.

* This is being seen as a major step towards making Mumbai an International Financial Services Centre (IFSC) and providing an arbitration platform for Indian business houses to negotiate commercial disputes.

Key facts:

* The MCIA will be an independent, not-for-profit organisation governed by a council comprising eminent national and international legal luminaries.
* It can resolve disputes between different companies or individual.
* It will have a 12-month timeline to complete arbitration seated in India and a prescribed fee structure as per the size of the disputed contract amount, which will enable both parties to know the cost of arbitral proceedings before they approach MCIA.

Significance of MCIA:

At present, most of the global business disputes involving Indians land in the Singapore or the London arbitration centres. The total outflow of funds to resolve such cases, complete with logistics and other related expenditure, works out to around $ 5 billion, sources said. A centre in India can significantly bring down this cost.

**IMFC Plenary on ‘IMF Institutional Issues’**

A plenary session of the International Monetary and Finance Committee (IMFC) on “IMF Institutional Issues” was recently held in Washington.

All about IMFC:

* The IMFC has 24 members, drawn from the pool of 187 governors.
* Its structure mirrors that of the Executive Board and its 24 constituencies. As such, the IMFC represents all the member countries of the Fund.
* The IMFC meets twice a year, during the Spring and Annual Meetings.
* The Committee discusses matters of common concern affecting the global economy and also advises the IMF on the direction its work.
* At the end of the Meetings, the Committee issues a joint communiqué summarizing its views. These communiqués provide guidance for the IMF’s work program during the six months leading up to the next Spring or Annual Meetings.
* There is no formal voting at the IMFC, which operates by consensus.
* The IMFC advises and reports to the IMF Board of Governors on the supervision and management of the international monetary and financial system, including on responses to unfolding events that may disrupt the system.
* It also considers proposals by the Executive Board to amend the Articles of Agreement and advises on any other matters that may be referred to it by the Board of Governors.
* Although the IMFC has no formal decision-making powers, in practice, it has become a key instrument for providing strategic direction to the work and policies of the Fund.

**BRICS Contingent Reserve Arrangement Operational**

BRICS Contingent Reserve Arrangement has become operational. This arrangement is being seen as a crucial economic mechanism to help BRICS member nations – Brazil, Russia, India, China and South Africa – deal with economic crisis, like balance of payments pressures.

Background:

The Contingent Reserve Arrangement or CRA was declared operational, after being signed more than a year ago, in 2015.

What it does?

The BRICS CRA proposes to provide short-term liquidity support to the members through currency swaps to help mitigating BOP crisis situation, in case such a situation arises.

Benefits:

* The BRICS CRA will help India and other signatory countries to forestall short-term liquidity pressures, provide mutual support and further strengthen financial stability.
* It would also contribute to strengthening the global financial safety net and complement existing international arrangements (from IMF) as an additional line of defence.
* It will ensure equity and inclusiveness by providing a backup safety net arrangement in place that will allow the Government of India to go ahead with its necessary and bold policy decisions without being concerned about the international economic development that may lead to domestic imbalances and worsen BOP position.
* So far IMF support is the primary safety net that is available to India in case any BOP crisis situation arises.

**Facts for Prelims**

**First Medipark in India**

• HLL Lifecare Ltd, a mini-ratna company, would be setting up a medical devices manufacturing park (Medipark) at Chengalpattu, a town in the outskirts of Chennai.

• It will be completed in seven years, being developed in different phases.

-Significance

• The Medipark would be the first manufacturing cluster in the medical technology sector in the country, and would play a key role in the development of medical devices and technology industry and allied disciplines.

• India imports about 70% of its medical equipments and devices. It is almost completely dependent on imports for high-end items like imaging equipment, pace makers, and breathing and respiration equipment. Domestic manufacturing of the devices and equipment would bring down the cost and make healthcare more affordable.

• As part of India’s Make in India initiative this will generate direct employment for about 3000 people and indirect employment for many more thousands once it is operational.

**Insights Daily Current Affairs, 11 October 2016**

**CERC panel suggests overhaul in transmission planning**

A committee appointed by the Central Electricity Regulatory Commission has suggested an overhaul in transmission planning to facilitate transfer of power on economic principles. The committee was headed by power system expert Mata Prasad.

Important suggestions made by the committee:

* Transmission planning should be aligned to meet customer aspirations as opposed to the existing system where transmission is associated with long-term power purchase agreements (PPAs).
* According to the committee, transmission planning can be done on the basis of projected load of the states and anticipated generation scenario based on economic principles of merit order operation.
* In case of renewable energy sources, the transmission system may be planned by the central transmission utility (CTU) based on estimated capacity additions in perspective plan and renewable purchase obligations of each state.
* To promote the power market, the transmission corridor allocation should be suitably made. 5% of each flow gate may be reserved for day-ahead collective transactions, which may be released for the contingency market in case of non-utilisation of the corridor by power exchanges. The percentage of reservation may be reviewed after one year of operation.
* The committee has suggested system studies be carried out for various generation and load scenarios during peak and off-peak hours, considering renewable capacity addition and scheduling of various generating stations that don’t have any PPAs.
* The committee has emphasised the need for the creation of a central repository of generators in the Central Electricity Authority of India (CEA), where any generation project developer proposing to set up a new generation plant must register itself. This will not only provide vital data for the transmission planning process but will alleviate problems due to uncoordinated generation additions.
* The committee has also made a strong case for hand-holding of states by CEA and CTU for accurate demand forecasting. It is also suggested that states procure software for short-term, medium-term and long-term demand forecasting.

**Nobel Prize in Economics**

Oliver Hart and Bengt Holmstrom have been awarded the Nobel Memorial Prize in Economic Science for their insights into how best to write contracts, the deals that bind together employers and their workers, or companies and their customers.

What they won for?

Both the awardees have sought to determine how contracts can encourage mutually beneficial behaviour. Among the contracts they have studied is Holmstrom’s research on employment contracts, including between CEOs and shareholders.

* Hart’s research has looked at whether providers of public services, such as schools, hospitals, or prisons, should be publicly or privately owned. The research showed that “incentives for cost reduction are typically too strong”. Privatizing those types of services can lead to a reduction in quality greater than the advantages of cost savings.
* Hart and his co-authors were particularly concerned about private prisons. Federal authorities in the United States are in fact ending the use of private prisons, partly because — according to a recently released U.S. Department of Justice report — conditions in privately-run prisons are worse than those in publicly-run prisons.”

**HIMANSH**

It is India’s Remote and High-Altitude research Station opened recently in Himalaya.

Key facts:

* It is Indian government’s initiatives to better study and quantify the Himalayan glacier responses towards the climate change.
* It is located at a remote region in Spiti, Himachal Pradesh.
* It has been established by the National Centre for Antarctic and Ocean Research (NCAOR), Goa, under the Ministry of Earth Sciences.
* The station houses many instruments to quantify the glacier melting and its relation to changing climate. Some of the instruments that are available at this research facility include, Automatic Weather Stations for weather monitoring, water level recorder for quantifying the glacier melt and ground penetrating radar to know the thickness of glaciers.
* The researchers would be using this as a base for undertaking surveys using Terrestrial Laser Scanners (TLS) and Unmanned Aerial Vehicles (UAV) that would digitize the glacier motion and snow cover variations with exceptional precision.

**NCBC to consider proposal for Maratha quota if it comes**

The National Commission for Backward Classes has said that it will consider giving reservation to Marathas if such a proposal comes to it.

Background:

Marathas, the politically-dominant community in Maharashtra, have been agitating for last few weeks raising various demands including quota in government jobs and education institutes.

Meanwhile, the state government is facing a legal challenge in defending the Act notified in March 2015 for a 16 quota in jobs and education entry to the Maratha community.

NCBC:

* National Commission for Backward Classes is statutory body established in August 1993, under the provisions of National Commission for Backward Classes Act, 1993.
* The commission was the outcome of the direction of the Supreme Court in the Mandal case judgement.
* The commission has five members with 3 yrs term:
  + a Chairperson who is or has been a judge of the Supreme Court or of a High Court;
  + a social scientist;
  + two persons, who have special knowledge in matters relating to backward classes;
  + a Member-Secretary, who is or has been an officer of the Central Government in the rank of a Secretary to the Government of India.
* The commission considers inclusions in and exclusions from the lists of communities notified as backward for the purpose of job reservations and tenders the needful advice to the Central Government.

**Nasa’s ‘electric bandage’ to speed up wound healing**

Nasa has developed a new high-tech material that uses electricity to significantly promote healing of injured wounds.

* The material, called polyvinylidene fluoride (PVDF) has numerous possible applications, including wound healing.

How it operates?

It is proven that wounds tend to heal much more quickly if small amounts of electricity are applied to the surrounding tissue. The new material generates a small amount of electricity when interacting with another surface, including human skin.

* If the PVDF fibres are aligned correctly, cells on a wound use it as a scaffold, helping the wound to heal faster. The easiest way to align the fibres is to make gauze which also creates an additional layer of protection against infection.
* The device can also be used by military personnel wounded in the field, patients who have undergone surgery and even those who have suffered a serious wound.

**Insights Daily Current Affairs, 12 October 2016**

**Who will regulate pension products?**

The Finance Ministry has set up a high-level committee to consolidate the regulation of pension products that is currently being done by three different watchdogs including the insurance and stock market regulators.

* The committee will be formed by the Department of Financial Services, would have representatives from all financial sector regulators — SEBI, IRDA, RBI and PFRDA.

Need for consolidation:

Pension product regulation is piecemeal in India. While the Pension Fund Regulatory and Development Authority (PFRDA) was set up with the intent of regulating all pension products, insurers and mutual funds continue to sell pension products outside its watch, creating confusion among consumers looking to build a retirement nest egg.

Currently, pension products floated by insurance companies come under the purview of the Insurance Regulatory and Development Authority (IRDA) while those sold by mutual funds are overseen by the SEBI.

Way ahead:

The Centre has asked the committee to look into the issue of bringing all those companies which are offering pension plans under the purview of PFRDA.

PFRDA:

The Pension Fund Regulatory and Development Authority (PFRDA) is a pension regulatory authority which was established in 2003.

* It is authorized by Ministry of Finance, Department of Financial Services.
* It promotes old age income security by establishing, developing and regulating pension funds and protects the interests of subscribers to schemes of pension funds and related matters.
* It is also responsible for appointment of various intermediate agencies such as –
  + Central Record Keeping Agency (CRA),
  + Pension Fund Managers,
  + Custodian,
  + NPS Trustee Bank, etc.

**Global Hunger Index**

According to the latest Global Hunger Index data, hunger levels in developing countries may have fallen 29% since 2000, but India is still rated as a country with ‘serious’ hunger levels in the 2016.

Key facts:

* The report is released by the International Food Policy Research Institute (IFPRI).
* The hunger index ranks countries based on –
  + undernourishment,
  + child mortality,
  + child wasting (low weight for height)
  + child stunting (low height for age).
* The GHI ranks countries on a 100-point scale. Zero is the best score (no hunger), and 100 is the worst, although neither of these extremes is reached in practice.

Highlights of the report:

* It ranked India 97 among 118 countries, faring worse than all its neighbours China (29), Nepal (72), Myanmar (75), Sri Lanka (84) and Bangladesh (90), except for Pakistan (107) in measures of hunger.
* The report found that –
  + 1 in 3 children in India has stunted growth,
  + 15% of the country’s population are undernourished.
  + India’s score is 28.5.
* The report also said that another 43 countries, including India, Nigeria and Indonesia, have “serious” hunger levels.
* Sub-Saharan Africa has the highest hunger levels, followed closely by South Asia.

**Nagaland, Manipur cheer as Amur falcons arrive**

Thousands of Amur falcons, small birds of prey that undertake one of the longest migrations have started arriving in Wokha district in Nagaland and Tamenglong district of Manipur. Wokha district(Nagaland) is a declared second home of the Amur falcons.

About Amur Falcons:

* Amur falcons are the longest travelling raptors in the world. They weigh just 150 grams.
* Males are mostly grey in colour and the females have dark-streaked cream or orange underparts.
* The species flies non-stop from Mongolia to northeast India covering 5,600 km in five days and nights, a small part of its 22,000 km circular migratory journey.
* The birds halt briefly in Myanmar. After a month or so, they reach central and western India en route to South Africa.
* Until recently, Naga tribesmen used to hunt thousands of Amur falcons for meat. But, after a vigorous campaign by wildlife activists, they have pledged to protect the bird and since then, not a single bird has been hunted in the area.

**Centre eyes sops to spur internal trade**

The Centre is planning a three-pronged approach to revitalise India’s retail and wholesale trade. This includes:

* Establishing a regulatory body for national internal trade (retail and wholesale).
* A comprehensive domestic trade policy.
* A Board for Internal Trade.

Details:

* The new approach aims to generate employment and improve financial inclusion of small traders. It also aims to enhance ease of doing business in the country.
* It will also be linked to the NDA government’s flagship initiatives such as Digital India, Skill India and Make In India.

Background:

Currently there is no single regulatory body or ministry for domestic trade — comprising mainly non-corporate small businesses providing employment to an estimated 460 million people. Also, the current approach and the environment is considered only conducive for foreign retail giants and their Indian partners or counterparts

There are about six crore such enterprises in the country with an annual turnover of around Rs.30 lakh crore. About 70% of the country’s retail trade has not been linked to computers and digitised.

**Insights Daily Current Affairs, 13 October 2016**

**Draft Water Bill suggests basin-level management**

The Centre has come out with a draft National Water Framework Bill, 2016.

Aim of the Bill: It aims to resolve several inter-state disputes over river water sharing.

Highlights of the draft:

* The draft says that every person has a “right to sufficient quantity of safe water for life” within easy reach of the household regardless of caste, creed, religion, age, community, class, gender, disability, economic status, land ownership and place of residence.
* It provides for a mechanism to develop and manage river basin in an integrated manner so that every state gets “equitable” share of a river’s water without violating rights of others.
* It pitches for establishing River Basin Authority for each inter-state basin to ensure “optimum and sustainable” development of rivers and valleys.
* It also devises an integrated approach to conserve water and manage groundwater in a sustainable manner.
* The draft Bill proposes establishing institutional arrangements at all levels within a state and beyond up to an inter-state river-basin level to “obviate” disputes through negotiations, conciliation or mediation before they become acute.
* It also says that each River Basin Authority will prepare a master plan for the river basin, under its jurisdiction, comprising such information as may be prescribed. The master plan, so prepared, will be reviewed and updated every five years after due consultation with all other planning agencies and stakeholders.

Key facts:

* Since water is a ‘state’ subject, the proposed legislation will not be binding on states for adoption even if it becomes a law through Parliament in due course.
* It will work as a model bill for the states, giving them a framework to come out with local laws to use and conserve water.

Way ahead:

The draft Bill will go to the Union cabinet for its approval. Once it gets the required nod, the Union water resources ministry will introduce it in the Parliament.

**SIT set to comb P-Note data for black money**

The special investigation team (SIT) on black money has asked the Securities and Exchange Board of India (Sebi) to furnish the details of all those investing through participatory notes (P-Notes).

* This is the first time the government-constituted body has sought such massive amount of data, which includes the list of beneficial owners and transfer trials of investors taking the P-Note route to invest in domestic equity and debt markets.

Background:

The SIT wants to ensure that the regulatory changes made by Sebi are sufficient to curb misuse of tools, particularly with respect to end beneficiaries. The expert panel is concerned that the P-Note route could still be used by Indian companies to bring back unaccounted money.

* In May, Sebi tightened norms for P-Notes. It had increased KYC requirement, issued curbs on transferability and prescribed stringent reporting for P-Notes issuers and holders. It mandated issuers to follow anti-money laundering laws.
* The tightening of P-Note norms was triggered by the concerns raised by SIT in 2015, especially over the investment coming from Cayman Islands, the top destination for P-Note investors investing in the Indian securities market.

P-Notes:

P-Notes are derivative products issued by FPIs in foreign markets which give their holders the right to have a share of the profit and loss from underlying Indian stocks but at the same time help maintain anonymity about the actual owners of those notes.

P-Notes allow foreign investors to take exposure to Indian stocks without registering with Sebi. These instruments are issued by foreign portfolio investors (FPIs) registered with Sebi.

Government concerns

• The primary reason why P-Notes are worrying is because of the anonymous nature of the instrument as these investors could be beyond the reach of Indian regulators.

• Further, there is a view that it is being used in money laundering with wealthy Indians, like the promoters of companies, using it to bring back unaccounted funds and to manipulate their stock prices.

Why data combing it important?

• This is the first time the government-constituted body has sought such massive amount of data, which includes the list of beneficial owners and transfer trials of investors taking the P-Note route to invest in domestic equity and debt markets, to bring back unaccounted money.

• SIT suspects some links between the individuals linked to offshore companies floated by Panama law firm Mossack Fonseca.

• A major chunk of outstanding ODIs (offshore derivative instruments) invested in India – 31.31% - are from Cayman Islands having a negligible population.

• Currently, the P-Note assets in the country are around Rs 2.1 lakh crore – 8.4 per cent of the total FPI assets, coming down from about 50% in 2007

**India to promote indigenous expertise in cyber security, to fund start-ups**

- India is building its first platform for homegrown cyber security companies to promote indigenous expertise in the field and help local firms get a larger share of the country’s digital security technology budget.

-Indian government and NASSCOM have come together to create a platform for cyber security products and solution companies

-It aims to create a special fund for cyber security start-ups.

-It will be the first platform for homegrown cyber security companies;

-Significance

• To build local solutions to tackle internet security challenges.

• To promote indigenous expertise in the field

• To help local firms get a larger share of the country’s digital security technology budget.

-Data Security Council of India (DSCI) part of industry body NASSCOM will collaborate with the Department of Electronics and Information Technology (DeITY) and the Technology Development Board of the Department of Science and Technology for the platform and funds.

 Need for indigenous expertise in cyber security:

* India’s cyber security market size is about $4 billion (about Rs 26, 729.5 crore), which is expected to grow nine-fold to $35 billion by 2025.
* According Nasscom data, there are about 150 cyber security companies in India. However, the security landscape in India still remains considerably untouched by investors.
* Besides, in some ways, cyber-attacks are 21st century plagues, and to stay secure, we need widespread immunity and awareness. India is not there yet.

**Regional air link scheme may use e-auction path**

The civil aviation ministry is all set to start the bidding process of routes under the regional connectivity scheme (RCS) and it has sought the coal ministry’s suggestions on e-auctioning in this regard.

Key facts:

* The government will unveil the final RCS policy soon after which it will invite bids from the airlines wanting to fly on regional routes.
* The Airports Authority of India (AAI), the nodal body entrusted to implement the ambitious scheme, has written to the coal ministry to share its experience on the modus operandi of the coal block e-auction process.
* The civil aviation ministry will do the bidding of the routes through state-owned Metal and Scrap Trading Corporation (MSTC) — the body which conducts the coal mine and iron ore auction.

**About UDAN scheme**

About

• UDAN is an innovative scheme to develop the regional aviation market.

• The objective of the scheme was “Ude Desh Ka Aam Naagrik”.

Key Features

• UDAN will be applicable on flights which cover between 200 km and 800 km with no lower limit set for hilly, remote, island and security sensitive regions.

• The scheme seeks to –

* reserve a minimum number of UDAN seats i.e. seats at subsidized rates
* cap the fare for short distance flights.

• This would be achieved through two means:

* A financial stimulus in the form of concessions from Central and State governments and airport operators like tax concessions, exemptions from parking and landing charges etc.
* A Viability Gap Funding to the interested airlines to kick-off operations from such airports so that the passenger fares are kept affordable.
  + The VGF would be provided by a market based model. The operators would submit their proposals to the implementing agencies would then be offered for competitive bidding through a reverse bidding mechanism and the route would be awarded to the participant quoting the lowest VGF per Seat.
  + Such support would be withdrawn after a three year period, as by that time, the route is expected to become self-sustainable.

• A Regional Connectivity Fund would be created to meet the VGF requirements under the scheme.

Centre:State = 80:20 share of VGF; Centre money from - RCF levy per departure will be applied to certain domestic flights;

• For balanced regional growth, the allocations under the scheme would be equitably spread across the five geographical regions of the country viz. North, West, South, East and North-east.

• The selection of airports where UDAN operations would start would be done in consultation with State Government and after confirmation of their concessions.

• The scheme UDAN envisages providing connectivity to un-served and under-served airports of the country through revival of existing air-strips and airports.

• The scheme would be in operation for a period of 10 years.

Significance

• The scheme would ensure affordability, connectivity, growth and development.

• This would help in generating employment. As per the International Civil Aviation Organisation that every rupee invested in civil aviation add Rs 3.5 to the economy and every job created directly generates 6.1 jobs indirectly.

• It provides an additional business opportunity by increasing the potential for moving existing perishable cargo, fragile goods and high-value export-oriented products by air.

• The state governments would reap the benefit of development of remote areas, enhance trade and commerce and more tourism expansion through the introduction of small aircrafts and helicopters.

• For incumbent airlines there was the promise of new routes and more passengers while for and start-up airlines there is the opportunity of new, scalable business.

• Commercialising the ‘un-served’ and ‘under-served’ airports (416 in total) will “democratise” publicly-owned sites which have hitherto been reserved for elite use. The average citizen would get a participative stake in their use and development.

Criticisms

• Airlines represent luxury. In a poor country like India it seems a case of misplaced priorities when governments and passengers have to bear the cost of additional subsidies to connect regional air routes.

• India is the fastest growing aviation market in terms of passenger traffic. Between January and September 2016, passenger traffic within India grew 23.17%. Aviation regulator’s data showed that all the licensed airlines overshot their regional connectivity quota. In other words, they flew more than what is mandated by regulations. It suggests that from this stage market dynamics may drive regional connectivity. State subsidies, therefore, are best used elsewhere.

• The assumption that three years would be enough to make a route sustainable might be misplaced. It does not take into account a scenario of fuel cost increase that would significantly change the air cost dynamics.

The environment for airlines to operate is already highly taxed (taxes on ATF is among the highest in the world). So another levy to fund the regional connectivity scheme is annoying airlines further;

**Human hair used to produce cheaper cathodes for solar cells**

Researchers at the Indian Institute of Science Education and Research (IISER) in Kolkata have used human hair to produce cost-effective, metal-free cathodes for use in solar cells. This is the first instance where a bio-waste-derived electrode has been used as cathode in a quantum dot sensitised solar cell device.

How is it done?

Producing graphitic porous carbon cathode using human hair is simple, quick and inexpensive. Unlike in the case of other synthetic porous carbons, no physical or chemical activation process or templates are required to produce the pores of 2-50 nm diameter.

* The porosity, along with high surface area to volume ratio, plays an important role in adsorption-desorption of electrolyte.
* The cleaned and dry human hair is first treated with sulphuric acid at 165 degrees C for 25 minutes to achieve precarbonisation. It is then heated to different temperatures in the presence of an inert gas for six hours to carbonise and bring better electrical conductivity for efficient charge transfer.

Benefits:

* The cathode shows an impressive performance in converting visible sunlight to electricity much higher than commercially available activated carbon cathodes and is comparable with commonly used cathodes made of platinum metal and metal sulfides.
* Besides its higher efficiency to convert visible sunlight to electricity, the cathode was found to generate high open-circuit voltage, which is at par with conventional platinum and activated carbon cathodes. Thereby, the power conversion efficiencies can also be enhanced.
* They also have the potential to bring down the cost of solar cells.

**Insights Daily Current Affairs, 14 October 2016**

**Cabinet approves revision of ethanol price**

The Cabinet Committee on Economic Affairs has approved the mechanism for revision of ethanol price for supply to Public Sector Oil Marketing Companies (OMCs) to carry out the Ethanol Blended Petrol (EBP) Programme.

• The government has moved towards a new pricing mechanism for sugar-extracted ethanol which is used for blending in petrol. The government had initiated the ethanol blending programme way back in 2003 with an aim to cut import dependence on crude oil. Initially the quantity was fixed at 5% which was slowly supposed to be raised to 10%.

• However, this could not be done on account of the various constraints faced by the Oil Marketing Companies (OMCs) like state specific issues, supplier related issues including pricing issues of ethanol etc.

-Implications

• Moving towards a free-market structure, the price of ethanol will now be determined on the basis of prevalent price of sugar in the open market as also demand-supply situation.

• The prices of ethanol will be reviewed and suitably revised by the government at any time during the ethanol supply depending upon the prevailing economic situation and other relevant factors.

Background:

Ethanol Blended Petrol (EBP) Programme was launched by the Government in 2003 which has been extended to the Notified 21 States and 4 Union Territories to promote the use of alternative and environment friendly fuels. This intervention also sought to reduce import dependency for energy requirements.

* However, since 2006, OMCs were not able to receive offers for the required quantity of ethanol against the tenders floated by them due to various constraints like State Specific issues, Supplier related issues including Pricing issues of ethanol.
* In order to augment the supply of ethanol, a need was felt to put in place a new mechanism for pricing of ethanol. Accordingly, the Government in December, 2014 decided that the delivered price of ethanol at OMC depots would be fixed in the range of Rs. 48.50 per litre to 49.50 per litre including Central/State Government taxes and transportation charges.
* The decision has helped in significantly improving the supply of ethanol. Ethanol supplies increased to 67.4 crore litres in 2014-15 and the projected supplies for ethanol supply year 2015-16 are around 120 crore litres.

**Cabinet nod for Exim Bank’s MoU with New Development Bank**

The Union Cabinet has given its nod to Exim Bank of India for entering into a Memorandum of Understanding (MoU) on general cooperation with the New Development Bank (NDB), a multilateral development bank established by the BRICS nations.

• It is a non-binding umbrella agreement which aims at establishing a cooperation framework in accordance with the national laws and regulations, along with skills transfer and knowledge sharing amongst the signatories.

-Benefits of MoU

• It will enhance trade and economic relations among the BRICS countries.

• It is strategically relevant for cooperation for sustainable development and inclusive economic growth.

• It will help India play an enhanced international role.

Background:

The establishment of the NDB — in July 2014 — reflects the close relations among the BRICS countries and provides a powerful instrument for increasing their economic cooperation and help India play an enhanced international role.

About EXIM bank:

* Export–Import Bank of India was established in 1982 under the Export-Import Bank of India Act 1981.
* Since its inception, Exim Bank of India has been both a catalyst and a key player in the promotion of cross border trade and investment.
* Over the period, it has evolved into an institution that plays a major role in partnering Indian industries, particularly the Small and Medium Enterprises, in their globalisation efforts, through a wide range of products and services offered at all stages of the business cycle, starting from import of technology and export product development to export production, export marketing, pre-shipment and post-shipment and overseas investment.

**India to eliminate use of HFC-23 by 2030**

Taking the lead on tackling climate change, India has announced that it will eliminate the use of HFC-23, a greenhouse gas that harms the ozone layer, by 2030.

Background:

The announcement came at a meeting of parties to the Montreal Protocol at Kigali in Rwanda where final negotiations are taking place to substantially reduce the use of HFCs (hydrofluorocarbons) by 2030. The Montreal Protocol, which came into force in 1989, is aimed at reducing the production and consumption of ozone depleting substances in order to protect the earth’s fragile ozone layer.

Key facts:

* As per Delhi-based think tank Centre for Science and Environment, the move will potentially check emissions of HFC-23 equivalent to 100 million tonnes of CO2 over the next 15 years.
* Companies have been asked to internalize the cost of this environmental externality and create sufficient storage facility to take care of down time and run the incinerators to ensure that HFC-23 is not released in the atmosphere.
* With this domestic legislation to control the emissions of HFC-23, India is also sending a strong signal to the world that it is serious about the climate change issue.

About HFC 23:

* HFC-23 is a potent greenhouse gas with global warming potential of 14,800 times more than that of CO2.
* It is a by-product of HCFC-22, which is used in industrial refrigeration.

**SC says jails are overcrowded by 150 %, laments plight of inmates**

The Supreme Court has expressed concern over the pathetic condition of jails in the country. The court has also blamed Delhi and other state governments for paying “little or no attention” to the fundamental rights of under trials and convicts.

Key facts:

* According to official data, two of every three persons incarcerated in India have not yet been convicted of any crime.
* The number of convicts in jails grew by 1.4% from 2012 to 2013, but the number of undertrials shot up by 9.3% during the period.
* Men make up more than 90% of all prison inmates. Nearly 2,000 children of women inmates live behind bars, 80% of those women being undertrials.
* Undertrials are younger than convicts — nearly half are under the age of 30 and over 70% have not completed school.

Important observations made by the court:

* The court, in a judgment on a suo motu Public Interest Litigation (PIL), observed that prisons are crammed with inmates by over one and a half times the permissible limit.
* The judgment also observed that “Fundamental rights and human rights of people, however they may be placed, cannot be ignored only because of their adverse circumstances.”
* The court also said that that it was “unfortunate that in spite of directions by the Court, the prison authorities have not been able to take any effective steps for reducing overcrowding in jails”.

Background:

Authorities have defied repeated orders of the Supreme Court to draw a “viable” plan of action to de-congest jails. Instead, prison authorities have banked on ad hoc proposals like the construction of additional barracks or jails, and these proposals have no time limits for implementation.

The Ministry of Women and Child Development is yet to frame a Manual for Juveniles in Custody under the recently amended Juvenile Justice (Care and Protection of Children) Act, 2015.

Way ahead:

The court has ordered the Ministry of Home Affairs to receive and collate plans of action for de-congesting jails from the various States and Union Territories in the next six months. Moreover, the SC directed the government to prepare a viable Plan of Action within the next six months and hand it over to the apex court by March 31, 2017.

Sources: the hindu.

**Facts for Prelims**

**Women of India Festival 2016:**

* ‘Women of India Festival 2016’ of organic products by women was recently inaugurated in New Delhi.
* The Festival will offer on sale the biggest selection of organic products ranging from food, fabrics and furniture to wellness, personal care and solar products.
* It is being organised and sponsored by the Union Ministry of Women & Child Development.
* It celebrates and promotes women entrepreneurs from across India. Participants from the remotest areas of the country will travel to Delhi for the entire duration of the festival and sell their unique products in the capital.
* This initiative is a move to benefit women entrepreneurs, and also actively promote organic food and products.
* The Women of India Festival is also intended to highlight the health and environmental advantages of organic goods, provide a platform for women engaged in this economy and encourage the development of sustainable and easily accessible sales outlets for organic producers from remote areas.

**IIM at Jammu:**

* The Union Cabinet has approved the establishment and operationalisation of Indian Institute of Management (IIM) at Jammu.
* The Cabinet also approved formation of an IIM Jammu Society under the Societies Registration Act, 1860.
* IIM Jammu will be run and managed by the Society with a Board of Governors (BOGs) to be constituted by the Government of India, which will administer the Institute and would be responsible for establishment and operationalisation of the Institute.
* At present, there are nineteen IIMs.

**Nobel Prize for Literature:**

* The American singer songwriter Bob Dylan has won the 2016 Nobel prize for literature.
* He is the first musician to win the award.

**Insights Daily Current Affairs, 15 October 2016**

**Centre plans to revive counter-terror body**

The Centre is planning to revive the National Counter Terrorism Centre (NCTC), a project conceived by the UPA government in 2012.

What next?

The government is planning to rework the NCTC proposal to allay the fears of State governments that their intelligence gathering mechanism would be encroached upon by the Centre.

What was proposed?

It was after the 26/11 Mumbai terror attack that the then Home Minister suggested setting up of the National Counter Terrorism Centre (NCTC), on the lines of the one in the United States and the British Joint Terrorism Analysis Centre, for coordinated counter-terror operations. However, concerned that such an agency could well be abused by the Centre for political ends, many Chief Ministers struck down the idea primarily because the unit was to function under the Intelligence Bureau and, unlike the U.S. agency, it would be empowered to conduct searches and arrests under Sections 43 and 43A of the Unlawful Activities Prevention Act.

Key facts:

* It has the power to conduct searches and arrests in any part of India.
* The NCTC, to be located within the Intelligence Bureau, will carry out counter-terror operations and collect, collate and disseminate data on terrorism.
* The agency will also maintain a data base on terrorist and their associates including their families.
* The NCTC will also formulate a response to terror threats. It is meant to serve as a single and effective point of control and coordination of all counter terrorism measures.
* It will also have the mandate to carry out anti-terror operations, if any, through, or in conjunction with, the State police.

Sources: the hindu.

*Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India’s interests.*

**India, Russia to set up agro irradiation centres**

India and Russia have signed a pact to set up 25 integrated infrastructure centers for irradiation treatment of perishable food items to improve shelf life and cut post-harvest losses.

Key facts:

* At least 7 centers will be set up in Maharashtra, with the first centre near Shirdi to be ready next year.
* Perishable items ranging from flowers to fish will be treated there on a commercial scale.
* The agreement was signed between Russia’s United Innovation Corporation (UIC) — a subsidiary of Rosatom State Atomic Energy Corporation — and Hindustan Agro Co-op Ltd on the sidelines of the BRICS Business Forum.
* As part of the agreement, a JV will be formed for this purpose.
* These irradiation centres will use the technology and technical solution based on gamma-facility and/or electron accelerator.

Background:

In irradiation, food products are subjected to a low dosage of radiation to treat them for germs and insects, increasing their longevity and shelf life.

Radiation treatment is carried out in dosage recommended by the International Atomic Energy Agency (IAEA) and it neither reduces the nutritional value of food nor spoils their taste and appearance.

How this will help India?

In India, according to estimates, post-harvest losses in food and food grains are around 40-50%, primarily due to insect infestation, microbiological contamination, physiological changes due to sprouting and ripening, and poor shelf life.

* The wastage of fruits and vegetables alone is about Rs. 60,000 crore annually. Including cereals, meat, pulses and flowers, the annual loss is estimated to be Rs. 2,50,000 crores. Besides, there are a few low level irradiation plants in the country, which are not adequate.
* With the proposed centres, it is possible to reduce these losses.

Sources: the hindu.

*Paper 2 Topic: Parliament and State Legislatures – structure, functioning, conduct of business, powers & privileges and issues arising out of these.*

**Smaller parties, Independents in Rajya Sabha unite for more talk time**

Vice-President Hamid Ansari has formally recognised a group of 22 MPs belonging to parties with less than four MPs and certain independents as a consolidated block — the United Group.

* This is only the third time in the history of Indian Parliament that this is happening, the first was in 1983, and the second in 1990.

What was the need for it?

Hailing from ideologically diverse backgrounds and including nominated MPs, this group of MPs have united to secure more time to speak in House debates, where their solitary or numerically lean status afforded them as little as three minutes of speech time.

Significance of this move:

Smaller parties and independent MPs who may want to contribute to debates rarely get enough time to put forward a cogent argument. But, with this grouping, now such MPs form the third largest group in the Rajya Sabha, after the Congress and the BJP. Now, they also will find a place in the Business Advisory Committee (BAC) that decides time allotment.

Time allotted to parties to speak on debates depends entirely on their strength in the House. A grouping of this kind will, therefore, make it possible to speak for.

Sources: the hindu.

*Paper 3 Topic: Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology.*

**Self-powered UV photodetector charges energy storage devices**

Researchers from the Indian Institute of Science (IISc), Bangalore, have developed a cost-effective, high-performance, self-powered UV photodetector that can use the harvested optical energy for direct self-charging of energy storage devices such as supercapacitor.

How was it developed?

The researchers developed the photodetector by integrating semiconducting vanadium doped zinc oxide (VZnO) nanoflakes with a conducting polymer.

* Zinc oxide (ZnO), the base material for UV detection, can be doped with vanadium to produce photodetectors that are self-powered. When doped with vanadium, the microstructure of ZnO changes from nanorods to closely-packed nanoflakes, causing an increase in the surface area to the volume of the material.
* The nanoflakes are 80% more porous than nanorods. The UV light that gets into the pores undergoes multiple reflections and finally gets absorbed.
* The VZnO nanoflakes are further annealed (heated and allowed to cool slowly) in the presence of hydrogen gas at 350 degree C (hydrogenated) to increase the conductivity and reduce the recombination of photo-generated charge carriers.

Key facts:

* The vanadium-doped zinc oxide nanoflake structure has 98% light-harvesting efficiency, which is much higher than the 84% seen in zinc oxide nanorods.
* The photodetector has superior performance in terms of faster detection of photo signals in the order of milliseconds even when UV light intensity is low.
* It can be used for operating electronic devices in the absence of external power source.

Sources: the hindu.

**Facts for Prelims**

**Vice-President Hamid Ansari is visiting Hungary and Algeria:**

* The Hungary visit should serve to underline and acknowledge the support and understanding that India has extended to that country over a long time.
* In the case of Algeria, which has rich oil, gas and phosphatic resources, India sees this visit as an opportunity to kindle interest in cooperative ventures. Collaboration in the field of space missions is also on the horizon.
* Hungary is a parliamentary constitutional republic in Central Europe. It is situated in the Carpathian Basin and is bordered by Slovakia to the north, Romania to the east, Serbia to the south, Croatia to the southwest, Slovenia to the west, Austria to the northwest, and Ukraine to the northeast. The country’s capital and largest city is Budapest. It is a member of the European Union, NATO, the OECD and the Schengen Area.
* Algeria is a sovereign state in North Africa on the Mediterranean coast. It is the largest country in Africa. Algeria is bordered to the northeast by Tunisia, to the east by Libya, to the west by Morocco, to the southwest by the Western Saharan territory, Mauritania, and Mali, to the southeast by Niger, and to the north by the Mediterranean Sea. The country is a semi-presidential republic.

**New Secretary-General of UN:**

* The United Nations General Assembly (UNGA) has formally elected **Antonio Guterres** as the new Secretary-General of the United Nations.
* He will serve for five years starting from January 1, 2017.
* The UN Secretary-General is the head of the United Nations Secretariat and is de facto spokesperson and leader of the UN.

**Insights Daily Current Affairs, 17 October 2016**

**Report on Palaeo Channel of North West India: Search for River Saraswati**

The government has released a Report on Palaeo Channel of North West India.

What are Palaeochannels?

They are remnant of once active rivers/streams or in other words, are paths abandoned by rivers when they change their course either due to movement of tectonic plates or severe floods and cut new ones. Some of the palaeochannels lie buried under younger sediments.

Key facts:

* The report has been prepared by an expert committee headed by Prof. K.S. Valdiya, eminent Geologist.
* This report is based on the study of the land texture of states of North-West India including- Rajasthan, Haryana and Punjab.
* The committee has taken account of the geological changes that had occurred in the past while preparing the report.
* During its six-month research period, the committee studied piles of sediments, their shapes and features which appeared to have been brought by a “big river” and are reminiscent to ones found in present-day Ghaggar, Ganga and Yamuna.

Significance of this report:

The report is an assertion of the assumption that River Saraswati originated from Adibadri in Himalaya to culminate in the Arabian Sea through the Runn of Kutch. This river was once upon a time the lifeline of the north- western states of India and a vibrant series of civilizations from Mahabharat period to Harappa had flourished on the banks of this river.

Important observations made by the report:

* Saraswati river passed through Haryana, Rajasthan and North Gujarat. It also passed through Pakistan before meeting Western Sea through Rann of Kutch and was approximately 4,000 km in length.
* One-third of the river stretch fell in present-day Pakistan. The longer, two-third stretch measuring nearly 3000 km in length fell in India.
* The river had two branches: western and eastern. The Himalayan-born Satluj “of the PAST”, which flowed through the channels of present-day Ghaggar-Patialiwali rivulets, represents the western branch of the ancient river.
* On the other hand, Markanda and Sarsuti represented the Eastern branch of Saraswati, known as Tons-Yamuna.
* The confluence of the branches was near Shatrana, 25 km south of Patiala. And suddenly, it flows crossing the dessert (Rann of Kutch) and meet gulf of western sea.

Suggestions made by the committee:

* The committee has recommended that the government legislate a law to regulate extraction of water from palaeochannels in view of low rainfall in dry stretches and “reckless” exploitation of freshwater for irrigation and other purposes.
* The panel suggested that it develop systematic database of all surface maps of palaeochannels and sub-surface stratigraphic data including geophysical surveys, borehole data, chemical quality and isotopic composition of groundwater in and around palaeochannel.
* It also proposed launching of a mission to facilitate accurate estimation of groundwater reserves.
* Among other, the committee has urged the government to make recharging as many “well-identified” palaeochannels as possible its “top priority”.

Way ahead:

The report will be studied by the Central Ground Water Board as well as the Experts in various ministries for its optimum use. Then, the report will be submitted before the Cabinet for further action.

Sources: pib.

*Paper 2 Topic: Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.*

**Mining Surveillance System**

The government has launched the Mining Surveillance System (MSS). It uses space technology for curbing illegal mining activity in the country.

Who developed it?

Developed under DIGITAL INDIA, by Ministry of Mines, through Indian Bureau of Mines (IBM), has developed the MSS, in coordination with Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG), Gandhinagar and Ministry of Electronics and Information Technology (MEITY).

Significance of MSS:

* Developed under the Digital India Programme, MSS is one of the first such surveillance systems developed in the world using space technology.
* The current system of monitoring of illegal mining activity is based on local complaints and unconfirmed information. There is no robust mechanism to monitor the action taken on such complaints.
* In this context, MSS is a satellite-based monitoring system which aims to establish a regime of responsive mineral administration, through public participation, by curbing instances of illegal mining activity through automatic remote sensing detection technology.

How it operates?

In the MSS the maps of the mining leases have been geo-referenced. The geo-referenced mining leases are superimposed on the latest satellite remote sensing scenes obtained from CARTOSAT & USGS.

* The system checks a region of 500 meters around the existing mining lease boundary to search for any unusual activity which is likely to be illegal mining. Any discrepancy if found is flagged-off as a trigger.
* Automatic software leveraging image processing technology will generate automatic triggers of unauthorized activities. These triggers will be studied at a Remote Sensing Control Centre of IBM and then transmitted to the district level mining officials for field verification. A check for illegality in operation in conducted and reported back using a mobile app.
* A user-friendly mobile app has been created which can be used by these officials to submit compliance reports of their inspections. The mobile app also aims to establish a participative monitoring system where the citizens also can use this app and report unusual mining activity.

Benefits

• States like Karnataka, which witnessed frequent instances of illegal mining in the past, will gain from the technology in the following manner.

o It will lead to transparency as the public can access to the system.

o It is a bias-free and independent system since it has scope for minimal human interference.

o It is characterized by quick response and action since there will be regular monitoring of mining areas, which will also have a deterrence effect.

o Effective follow-up on action taken on triggers

**National Summit on Fortification of Food**

The **National Summit on Fortification of Food** to address interventions in combating micronutrient malnutrition in the country was recently inaugurated.

Key facts:

* Food Safety and Standards Authority of India (FSSAI) is co-hosting the two day Summit in partnership with related central ministries / departments and development partners.

Background:

* Food fortification or enrichment is the process of adding micronutrients (essential trace elements and vitamins) to food.
* Food fortification is a proven and effective strategy to meet the nutritional needs of a large number of people across various sections of the society, including the poor and underprivileged as well as the vulnerable, such as pregnant women and young children.
* Fortification requires neither changes in existing food patterns, habits nor individual compliance.
* It is socio-culturally acceptable and does not alter the characteristics of the food.
* It can be introduced quickly and can produce nutritional benefits for populations in a short period of time.
* It is safe and cost effective, especially if advantage is taken of the existing technology and delivery platforms.
* Food fortification reinforces and supports existing nutrition improvement programmes and is part of a broader, integrated approach to prevent micronutrient deficiencies, thereby complementing other approaches to improve health and nutrition.

Food fortification in India:

Food Safety and Standards Authority of India (FSSAI) has formulated a comprehensive regulation on fortification of foods namely ‘Food Safety and Standards (Fortification of Foods) Regulations, 2016’.

**Kigali makes history with HFC freeze**

 197 countries have struck a new landmark deal at Kigali in Rwanda to reduce the emissions of greenhouse gases, hydrofluorocarbons (HFCs), which could prevent up to 0.5 degrees Celsius of global warming by year 2100.

Highlights:

* The announcement came at Kigali where 197 countries that are party to the **Montreal Protocol** were trying to negotiate a deal to substantially reduce the use of HFCs by 2030.
* The **Kigali Amendment to the Montreal Protocol is legally binding**.
* There are **penalties for non-compliance**
* Reduction to start from 2019;
* Under it, developed countries will also provide enhanced funding support estimated at billions of dollars globally. The exact amount of additional funding from developed countries will be agreed at the next Meeting of the Parties in Montreal in 2017
* Different timelines- All signatory countries have been divided into three groups with different timelines to go about reductions of HFCs. This agreement shows a new form of grouping:
* First group: It includes richest countries like US and those in European Union (EU). They will freeze production and consumption of HFCs by 2018. They will reduce them to about 15% of 2012 levels by 2036
* Second group: It includes countries like China, Brazil and all of Africa etc. They will freeze HFC use by 2024 and cut it to 20% of 2021 levels by 2045
* Third group: It includes countries India, Pakistan, Pakistan, Iran, Saudi Arabia etc. They will be freezing HFC use by 2028 and reducing it to about 15% of 2025 levels by 2047
* It is also decided to phase out HFC-23, and industry is asked to internalize the cost of this transition;

What is the Montreal Protocol?

The Montreal Protocol on Substances that deplete the Ozone Layer is a landmark international agreement designed to protect the stratospheric ozone layer. The treaty was originally signed in 1987 and substantially amended in 1990 and 1992.

The Montreal Protocol, which came into force in 1989, is aimed at reducing the production and consumption of ozone depleting substances in order to protect the earth’s fragile ozone layer.

Background:

Commonly used in refrigeration and air conditioning as substitutes for ozone-depleting substances, HFCs are currently the world’s fastest growing greenhouse gases, their emissions increasing by up to 10% each year. They are also one of the most powerful, trapping thousands of times more heat in the Earth’s atmosphere than carbon dioxide (CO2).

Growth of HFCs has mainly been driven by a growing demand for cooling, particularly in developing countries with a fast-expanding middle class and hot climates.

**BRICS meet declaration pledges to fight terror**

The 8th BRICS summit has ended with the adoption of the **Goa Declaration**.

The **theme for the summit was “Building Responsive, Inclusive and Collective Solutions”**.

Key highlights of the Goa declaration:

* The Declaration urged the dismantling of terror bases and said nations should adopt a comprehensive approach that includes tackling radicalisation, recruitment, cutting off terror funding systems and address terrorism on the internet and social media. The declaration mention ISIS, Al Qaeda and Jubhat ul Nusra.
* The declaration calls for a “holistic approach” and says all counter-terrorism measures should “uphold international law and respect human rights”.
* The declaration also emphasized the need for adaptation of Comprehensive Convention on International Terrorism (CCIT) in the UN General Assembly and the urgent need to reform the United Nations, including UN Security Council, to increase representation of developing countries.
* It also expressed its confidence in resolving international problems that require collective efforts for peaceful settlement of disputes through political and diplomatic means.
* The declaration also condemned unilateral military interventions and economic sanctions in violation of international law and universally recognised norms of international relations.
* Concerns about the situation in the Middle East and North Africa were also expressed. BRICS countries have expressed their support for finding ways to the settlement of the crises in accordance with international law and in conformity with the principles of independence, territorial integrity and sovereignty of the countries of the region.

Sources: pib.

**Facts for Prelims**

**BRICS U-17:**

* Brazil has lifted the 1st BRICS U-17 Football Tournament 2016. In the Finals they defeated South Africa 5-1.
* India hosted the first BRICS U-17 Football Tournament. It was held in Goa.
* The tournament was played among the ‘BRICS’ countries Brazil, Russia, India, China and South Africa.

**S-400 missile systems:**

* India and Russia have signed a deal on S-400 missile systems, a game-changer in countering airborne threats.
* Designed by the Almaz-Antey Central Design Bureau, the S-400 Triumf, referred to as SA-21 Growler by NATO, is considered one of the most advanced long-range defence systems in the world.
* It can tackle all airborne targets at a range of up to 400 km. The system has 8 launchers, a control centre, a powerful radar and 16 missiles that are available for reload.
* The system is capable of firing three types of missiles, hence creating a layered defence for any country that owns it.
* The S-400 would help check short and medium range ballistic missile threats.
* India is the second purchaser of this system after China, which had struck a deal with Russia for S-400 last year.

**Kamov:**

* India and Russia have signed a deal to jointly produce 200 Kamov Ka-226T helicopters, at the India Russia Summit in Goa. The helicopters are believed to boost the capabilities of the armed forces.
* Kamov 226T will replace the ageing Cheetah and Chetak choppers.
* Kamov is a small, twin engine Russian utility helicopter. It is manufactured by Russian Helicopters.
* This light multipurpose helicopter has a maximum takeoff weight of 3.6 tons. It can carry up to one ton payload. It has a maximum speed 220 Km/hr.
* The machine has excellent maneuverability and handling, easy maintenance.

**Manned mission by China:**

* China has successfully launched longest-ever manned mission by taking two astronauts into the orbit. They were launched on board of Shenzhou-11 spacecraft.
* The spacecraft was put into orbit by a Long March-2F carrier rocket.
* Both astronauts will spend a month aboard an experimental space laboratory Tiangong-2.
* During the mission, they will conduct aerospace medical experiments, space science experiments and in-orbit maintenance with human participation. They will also undertake ultrasound tests during space travel for the first time and cultivate plants in space.

**Insights Daily Current Affairs, 18 October 2016**

**Sagarmala funds flagship project of Ro Pax Ferry Service in Gulf of Cambay, Gujarat**

As part of promoting coastal shipping in the country under Sagarmala programme, the Ministry of Shipping has sanctioned the Capital Dredging Project for Ro Pax Ferry Services between Gogha & Dahej, in Gulf of Cambay in Gujarat.

* The Ministry has released Rs 58.50 Crore as first installment of grant-in–aid to Gujarat Maritime Board (GMB). The total project cost is estimated to be Rs 234 Crore and of which 50% will be funded by Centre Government under the Sagarmala programme.

Significance of this project:

* The project would result in reduction in motorable distance of 231 kms between Gogha & Dahej to mere 31 kms and reduce the travel time from 7 hours to 1 hour only by crossing the Gulf in Cambay in 17 Nautical Miles.
* The initiative would not only reduce the travel time but also result in savings in fuel, reduction in CO2 emission and reduction in road congestion.
* The project is first of its kinds in India as it will be executed in the area of world’s 2nd highest tidal range.
* The project would open up new avenues in coastal shipping & tourism and help in socio-economic development of proximate areas. It would also help in utilisation of inland waterways through River Narmada for shipping goods from industries located upstream.

Sagarmala Initiative:

The Sagarmala project seeks to develop a string of ports around India’s coast. The objective of this initiative is to promote “Port-led development” along India’s 7500 km long coastline.

* It aims to develop access to new development regions with intermodal solutions and promotion of the –
  + optimum modal split,
  + enhanced connectivity with main economic centres and beyond through expansion of rail, inland water, coastal and road services.
* The Union Ministry of Shipping has been appointed as the nodal ministry for this initiative.

The Sagarmala initiative will address challenges by focusing on three pillars of development, namely:

* Supporting and enabling Port-led Development through appropriate policy and institutional interventions and providing for an institutional framework for ensuring inter-agency and ministries/departments/states’ collaboration for integrated development.
* Port Infrastructure Enhancement, including modernization and setting up of new ports.
* Efficient Evacuation to and from hinterland.

Sources: pib.

*Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India’s interests.*

**BIMSTEC waxes as SAARC wanes**

India has declared its commitment to play an asymmetric role in energising BIMSTEC. Meanwhile, the BIMSTEC countries, endorsing the Indian stand without naming Pakistan, have slammed states which “support and finance terrorism, provide sanctuary to terrorists and terror groups” in BIMSTEC Leaders’ Retreat 2016 Outcome Document issued recently.

Background:

The leaders of seven-member BIMSTEC (The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) recently met in Goa for an outreach meeting with BRICS (Brazil, Russia, India, China and South Africa).

Key Highlights of document

• For countering terror

⎫ Strongly condemned the recent terror attacks in the region and called for strong measures for the states that encourage, support and provide sanctuary to terrorists.

⎫ Called for early ratification of the BIMSTEC Convention on Cooperation in combating International terrorism, criminal matters, transnational organized crime and drug trafficking.

• Cooperation for Environment- Agreement on greater efforts towards the conservation of the mountain ecosystems, bio-diversity and agreed for implementation of the Paris Agreement on Climate Change.

• Enhancing people to people contact- Proposed for establishment of BIMSTEC Buddhist Circuit and BIMSTEC Heritage Sites, decided to expedite the establishment of the BIMSTEC Cultural Industries Commission and BIMSTEC Cultural Industries Observatory in Bhutan.

• Fisheries and Food Security- Cooperation in sustainable development of fisheries in Bay of Bengal region.

• Eliminating Poverty- Reaffirmation to the commitment to effective implementation of the BIMSTEC Poverty Plan of Action.

• For Trade- Commitment to the early conclusion of BIMSTEC Free Trade Area negotiations was renewed along with directing the Trade Negotiating Committee (TNC) and Working Groups to expedite the finalization of its constituent agreements.

• Exploring other areas of development-Agreement to explore ways to deepen cooperation in areas such as aquacultures, hydrography, seabed mineral exploration, coastal shipping, eco-tourism and renewable ocean energy with the objective of promoting holistic and sustainable development of the region.

-Earlier also, Bay of Bengal had emerged as a vehicle for regional cooperation as BBIN grouping - Bangladesh, Bhutan, Nepal and India after Pakistan’s reluctance to sign on to the South Asian connectivity agreements at the SAARC summit, 2014.

Now, with the collapse of the SAARC summit in Islamabad, 2016 the Bay of Bengal has turned into a zone of regional cooperation

-Further, with rich history of maritime commerce across the Bay of Bengal and being high-end tourist destination there exist enormous possibilities for regional economic cooperation among the members of the BIMSTEC and SAARC (minus Pakistan);

Highlights:

* The BIMSTEC also said “there should be no glorification of terrorists as martyrs” — a clear reference to Hizbul militant Burhan Wani who was killed by security forces in Kashmir in July and later hailed as a “martyr” by Pakistan.
* The BIMSTEC document also strongly condemned the “recent barbaric terror attacks in the region” — a reference to attacks in Uri and Dhaka.
* BIMSTEC countries have also agreed reiterated their strong commitment to combat terrorism in all its forms and manifestations, and stress that there can be no justification for acts of terror on any grounds whatsoever.
* Additionally, BIMSTEC leaders have expressed their commitment to expedite the signing of the BIMSTEC Convention on Mutual Assistance in Criminal Matters, and early ratification of the BIMSTEC Convention on Cooperation in Combating International Terrorism, Transnational Organised Crime and Illicit Drug Trafficking.

About BIMSTEC:

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organization involving a group of countries in South Asia and South East Asia.

* The BIMSTEC comprises of seven countries, Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand.
* The main objective of BIMSTEC is technological and economical cooperation among South Asian and South East Asian countries along the coast of the Bay of Bengal.
* The headquarters of BIMSTEC is in Dhaka.
* It came into being on 6 June 1997 through the **Bangkok Declaration**.
* 3rd summit – 2016= india
* 4th summit – 2017 = Nepal

What this grouping means in numbers

The BIMSTEC region is home to around 1.5 billion people which constitute around 22% of the global population. The region has a combined gross domestic product (GDP) of $2.7 trillion. In the last five years, BIMSTEC member states have been able to sustain an average 6.5% economic growth trajectory despite global financial meltdown.

What is India’s interest in the grouping?

The BIMSTEC is a bridge between South Asia and Southeast Asia. The two Southeast Asian countries in the grouping, Myanmar and Thailand, have a crucial place for India’s ambitious connectivity plans for northeastern region. Myanmar is only Southeast Asian country India has a land boundary with. An India-Myanmar-Thailand highway is one of the key projects that figures in a big way in the government’s Act East (earlier Look East) policy. With the India-Pakistan bickering coming in way of a smooth functioning of the Saarc, groupings such as BIMSTEC can take forward the concept of regional cooperation in a different manner.

Sources: the hindu.

*Paper 2 Topic: Effect of policies and politics of developed and developing countries on India’s interests, Indian diaspora.*

**Now, India has a nuclear triad**

India has quietly completed its nuclear triad by inducting the indigenously built strategic nuclear submarine INS Arihant into service.

* With this India joins the select group of countries which have a nuclear triad, i.e. capable of delivering nuclear weapons by aircraft, ballistic missiles and submarine launched missiles.

Key facts:

* Arihant is capable of carrying nuclear tipped ballistic missiles, the class referred to as Ship Submersible Ballistic Nuclear (SSBN). SSBNs are designed to prowl the deep ocean waters carrying nuclear weapons and provide a nation with an assured second strike capability — the capability to strike back after being hit by nuclear weapons first.
* The vessel weighing 6000 tonnes is powered by a 83 MW pressurised light water nuclear reactor.
* It will be armed with the K-15 Sagarika missiles with a range of 750 km and eventually with the much longer range K-4 missiles being developed by the Defence Research and Development Organisation.

What does this mean for the world?

India’s deployment of a nuclear-armed submarine could put the nation into a naval arms race with regional powers, potentially prompting China to assist its nuclear-armed allies Pakistan and North Korea in developing similar technologies.

Both India and China subscribe to a No First-Use policy on nuclear weapons. They regard nuclear-armed submarines as a deterrence aimed at preventing the outbreak of war.

The Arihant is harder to detect than India’s nuclear weapons platforms on land and in the air, giving it a “second-strike” capability. This would allow India to retaliate against an enemy who managed to destroy the rest of its nuclear arsenal in a first-strike.

Which other countries have nuclear-armed submarines? =P5

The UK, USA, France, Russia and China already have nuclear-armed submarines.

Sources: the hindu.

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

**Law Commission suggests changes in govt. draft Bill on child abduction**

The 21st Law Commission in its first report has recommended a series of changes in the draft Civil Aspects of International Child Abduction Bill-2016, proposed by the Women and Child Development Ministry.

Recommendations made by the commission:

* One-year jail term for wrongful retention or removal of a child from the custody of a parent. The offenders may include one of the parents or family, relatives and others.
* Three months punishment for wilful misrepresentation or concealment of fact as regards the location or information about the child or for voluntarily preventing the safe return of the child.

Background:

The Law Commission had, in its 218th report, examined the same issues and advised the government to sign the **Hague** Convention on Civil Aspects of International Child Abduction.

* Upon coming to know that the government has prepared a draft of the Civil Aspects of International Child Abduction Bill, 2016, the Commission decided to examine the proposed provisions.
* The commission is of the opinion that it requires revision keeping in view the legislative precedents and practices followed in the drafting of Bills and to suitably harmonise its provisions with the Hague Convention.

Proposed Bill:

In June, 2016, the Ministry of Women and Child Development (MWCD) uploaded on its website a proposal to enact a draft of the Civil Aspects of International Child Abduction Bill, 2016. This was considered as it was imperative to have an enabling legislation in India before accession to the Hague Convention.

* The proposed Bill considered the removal to or the retention of a child in India to be wrongful if it is in breach of rights of custody attributed to a person, an institution, or any other body, either jointly or alone, at a place where the child was habitually resident immediately before the removal or retention.
* It further stipulated that the removal to or the retention in India of a child is to be considered wrongful where at the time of removal or retention those rights were actually exercised, either jointly or alone, by a person, an institution or any other body, or would have been so exercised, but for the removal or retention.
* The draft Bill was prepared following a reference made by the Punjab and Haryana High Court to the Law Commission of India to consider whether recommendations should be made for enacting a suitable law and for signing the Hague Convention.

**Insights Daily Current Affairs, 19 October 2016**

**10th India and United States Trade Policy Forum**

10th India-United States Trade Policy Forum (TPF) meetings are being held at New Delhi. These meetings aim to increase the bilateral interaction between the two countries and increase the momentum on resolving trade concerns.

* Under TPF there would be technical level discussions on issues concerning with Agriculture, Services and Goods, IPR and Manufacturing.

Significance of TPF:

* The TPF provides the venue for evaluating progress that has been made on trade and investment issues between the US and India at the ministerial level.
* It is the premier bilateral forum for the discussion and resolution of trade and investment issues between the US and India.
* It will allow the United States and India to advance on-going bilateral efforts to expand trade and investment through forward-looking policy initiatives that can benefit our manufacturers, workers, innovators, service providers, farmers, and ranchers.
* Discussions in the TPF are generally organized around key issue areas, including intellectual property, opening investment in manufacturing, agriculture, and services.

Background:

The bilateral commercial ties between the United States and India are growing stronger as reflected by increased bilateral trade in Goods and Services of $109 billion and highest ever FDI inflows in 2015-16. The bilateral cooperation under TPF has resulted in resolving several market access issues and cooperation in services, manufacturing and IPR. India is looking forward to maintain the momentum further in the current TPF.

Sources: pib.

*Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.*

**Small finance banks up the ante to grab deposits**

Small finance banks are adopting an aggressive strategy to garner savings deposits by offering interest rates higher than that offered by full-service banks.

* While most full-service banks offer 4% on savings bank deposits, small finance banks are offering or planning to offer between 5 and 7% on such deposits.

Background:

In 2015, Reserve Bank of India (RBI) gave in-principle approval to 10 entities for starting small finance bank operations. Most players that have received in-principle approvals are micro-finance institutions.

What are small banks?

The small finance bank will primarily undertake basic banking activities of acceptance of deposits and lending to unserved and underserved sections including small business units, small and marginal farmers, micro and small industries and unorganised sector entities.

What they can do:

* Take small deposits and disburse loans.
* Distribute mutual funds, insurance products and other simple third-party financial products.
* Lend 75% of their total adjusted net bank credit to priority sector.
* Maximum loan size would be 10% of capital funds to single borrower, 15% to a group.
* Minimum 50% of loans should be up to Rs 25 lakhs.

What they cannot do:

* Lend to big corporates and groups.
* Cannot open branches with prior RBI approval for first five years.
* Other financial activities of the promoter must not mingle with the bank.
* It cannot set up subsidiaries to undertake non-banking financial services activities.
* Cannot be a business correspondent of any bank.

The guidelines they need to follow:

* Promoter must contribute minimum 40% equity capital and should be brought down to 30% in 10 years.
* Minimum paid-up capital would be Rs 100 cr.
* Capital adequacy ratio should be 15% of risk weighted assets, Tier-I should be 7.5%.
* Foreign shareholding capped at 74% of paid capital, FPIs cannot hold more than 24%.
* Priority sector lending requirement of 75% of total adjusted net bank credit.
* 50% of loans must be up to Rs 25 lakh.

**Centre’s regional connectivity proposal may face turbulence**

The government’s plans to boost regional air connectivity could hit a legal air pocket as leading domestic airlines have opposed the proposal to charge a levy on flights on major routes to fund subsidies for regional flights and are likely to challenge it in the courts.

* Major airlines have termed the proposed regional connectivity levy as “illegal” and “in contravention to the Constitution of India.” According to them, the government is not empowered to levy a tax on airlines to fund the regional connectivity scheme under the Aircraft Act of 1934.

Background:

As a part of its proposed regional connectivity scheme, the Union Civil Aviation Ministry had mooted amendments to the Aircraft Rules of 1937 in August to set up a regional connectivity fund to subsidise the losses of airlines that wanted to fly on regional routes. The fund was proposed to be financed by a levy on domestic flights along with contribution from states and credit proceeds from other sources.

Passengers will be able to fly to unserved and underserved airports for a fare of Rs 2,500 an hour, under the scheme.

Arguments against this decision:

* A levy in the nature of tax can only be levied having regard to the provisions contained in the Article 265 of the Constitution of India i.e. by authority of law. Therefore, the draft rules as published ultra vires the Constitution of India and is illegal.
* Also, according to the airlines, imposition of a regional connectivity levy would require amendment to the Aircraft Act, 1934 and not the rule.
* Besides, Section 5(2) (ab) of the Aircraft Act of 1934 does empower the Centre to make rules for economic regulation of air services but it doesn’t authorise it “to introduce a levy in the nature of tax on air services.”

**SC not to hear Govt view on religion misuse**

The seven-judge Constitution Bench of Supreme Court is re-considering its 1995 verdict and has questioned whether the practice of using the mass religious appeal by leaders to canvas votes for candidates amounts to a corrupt electoral practice.

-Background

• SC is looking into the various means by which misuse of religion or faith of the masses for electoral gains can be categorised as a corrupt practice.

• It was also looking into electoral practices of political parties and candidates to rope in clerics or priests to flex their religious sway over particular religious community to swing votes.

• SC in its 1995 verdict held that canvassing votes in name of ‘Hindutva/Hinduism’ wasn’t a corrupt electoral practice under Sec 123 of RoPA, as Hinduism was not a religion but a way of life in India.

• S. 123(3) of the RPA regards ‘any appeal by a candidate or his agent to vote or refrain from voting for any person on the ground of his religion, race, caste, community or language’ as an electoral offence.

-Why it should over-rule the 1995 judgment:

• Seeking votes in the name of religion could affect the secular concept of elections in our democracy, and hence such a thing could not be allowed.

• Fundamentalism of any colour or kind must be curbed with a heavy hand to preserve and promote the secular creed of the nation.

• The bench observed that the “right to contest is a statutory right. Secularism is a basic feature.” So court is obliged to give a preference to it.

• Seeking votes in name of religion may exclude some sections cause a deep feeling of insecurity among minorities, free thinkers, atheists etc.,

• According to Justice S.A. Bobde, a judge on the Bench, the voters are pushed to either identify or differentiate between their religious identity and the faith of the candidate in question

• Against Unity and Diversity: the word ‘Hindutva’ is used and understood as a synonym of ‘Indianisation’, i.e., development of uniform culture by obliterating the differences between all the cultures coexisting in the country

-Why it should maintain status quo

• Judicial overreach: it was for parliament to revisit provision 123 (3).

* Interpretation contrary to the earlier ruling that Hinduism is a way of life would have the unintended consequence of the court sanitising the whole poll process, which should be left to the parliament.
* Poll process is heavily interlinked with caste and religious issues. So this is a political question and parliament itself has to solve this.

• Close to Reality: Democratic processes involving caste and religion are reality. Imposing this as corruption, may not be in touch with reality. This may lead to wide scale flouting. The change should be incremental and it should come from the society itself.

• Many inconsistencies which need parliament legislation: For instance, Section 123 is silent about whether a Jain or an atheist can seek votes in name of any religion.

-Way forward

• India is a secular country with lot of regional variations even among Hindu religion. ‘Hindutva’ should be understood in spirit rather than mis-using it for own political benefits.

• We see our neighbours and middle-east torn by religious conflicts. To avoid that the fundamental values of tolerance and peace etc., should be explicitly described as core value components of ‘Hindutva’ by SC to prevent further misuse.

**SC/ST hub**

The National SC/ST Hub, which provides support to entrepreneurs from the community, was recently launched by the PM.

Key facts:

* It will have an initial outlay of Rs 490 crore.
* The hub will work towards strengthening market access/linkage, monitoring, capacity building, leveraging financial support schemes and sharing industry-best practices.
* It will also enable central public sector enterprises to fulfill the procurement target set by the government. The Public Procurement Policy 2012 stipulates that 4 per cent of procurement done by Ministries, Departments and CPSEs would have to be from enterprises owned by SC/ST entrepreneurs;

**ZED scheme**

Prime Minister Narendra Modi recently launched the Zero Defect, Zero Effect (ZED) scheme for Micro, Small and Medium Enterprises (MSMEs).

What is it all about?

The ZED Maturity Assessment Model has been conceived and structured to offer graded benchmark levels of an organisation’s performance through a set of standard enabler and outcome parameters focusing on quality and environmental performances.

It aims to rate and handhold all MSMEs to deliver top-quality products using clean technology.

* The aim is to help MSMEs evolve and grow by providing them adequate training and funding to move up the value chain and produce quality products. The ZED model will sensitise MSMEs to emphasise delivery of high quality products with zero defects.
* There will be sector-specific assessment parameters for each industry such as food processing, textiles, leather, auto parts, etc.

**Facts for Prelims**

* Three hydro-electric projects (HEPs) with a generating capacity of 1,732 MW were recently inaugurated by PM in Himachal Pradesh. These include- 800 MW Hydro Power Station of NTPC at Koldam, 520 MW Parvati Project of NHPC and 412 MW Rampur Hydro Station of SJVNL project
* Germany is expanding its renewable energy capacity through wind parks owned by the community, a model that has made the small investor a partner in its transition away from coal and nuclear plants. Under this model, individuals can put in as little as 500 euros, going up to 10,000 euros, and reap a return from the Burgerwindparks in Schleswig-Holstein, Germany’s northernmost State facing the windy North Sea.

**IOC Athletes’ commission:**

* Indian shuttler Saina Nehwal has been appointed as a member of the International Olympic Committee’s (IOC) Athletes’ Commission.
* The IOC Athletes’ Commission is a body maintained by the International Olympic Committee for the purpose of representing athletes. It was established in 1981.
* The Commission is a consultative body whose function is to act as “the link between active athletes and the IOC”.
* It makes recommendations to the IOC’s executive bodies, and its chair serves as a member of the IOC Executive Board.
* It works in liaison with similar athletes’ commissions of the Continental Associations, individual National Olympic Committees and the International Sports Federations.
* 12 members are elected to the Commission by Olympic athletes for a term of eight years. In addition, the President of the IOC may appoint up to seven further members, “to ensure a balance between regions, gender and sports”, and there are two ex-officio members: one from the World Olympians Association, and one from the International Paralympic Committee.
* The elected members are usually also elected to the IOC itself shortly after becoming members of the Commission, and serve on the IOC for the duration of their membership of the Commission.

**Insights Daily Current Affairs, 20 October 2016**

**India, Algeria mull fertilizer JV**

India is keen to join hands with Algeria to explore the possibilities of setting up a multi-billion dollar fertilizer project, bearing in mind the phosphatic reserve available in this North African country which is estimated to be more than 5 billion tonnes. A meeting in this regard was also recently held between the two countries.

Background:

The estimated phosphate reserve in Algeria is estimated to be more than 5 billion tonnes and possible Indian investment in the sector is expected to be $5 to 7 billion.

Implications of this move:

Around 90 to 95% phosphate being used by Indian fertilizer companies is imported and the production cost is also very high. The price of fertilizer in India is expected to come down along with the subsidy burden if the talks between the two countries lead to setting up of a joint venture mega fertilizer company in Algiers.

India currently imports raw phosphate resources from a number of African countries including Tunisia, Jordan, Egypt and Syria, as also from Russia, Canada and Israel among others.

Key facts:

* Indian fertilizer industry is producing about 12.28 million tonnes of nitrogen and 4.37 million tonnes of phosphatic nutrient production.
* India ranks second in the production of nitrogenous fertilizers and third in phosphatic fertilizers.
* According to a report of department of fertilizers, by 2016-17, fertilizer demand in the country is projected to increase to about 336.77 lakh tonnes of urea, 124.13 lakh tonnes of DAP, 59.48 lakh tonnes of SSP and 47.93 lakh tonnes of MOP.

**KWDT-II verdict disappoints AP, TS**

The Krishna Water Disputes Tribunal II headed by Justice Brijesh Kumar has turned down the demands of AP and Telangana regarding their demand for redistribution of the Krishna river water among the four riparian states, including Karnataka and Maharashtra.

-Background

• Krishna Water Disputes Tribunal (KWDT I) was set up by the Central Government in 1969 under the Interstate River Water Disputes Act, 1956 to resolve the disputes between the states of Karnataka, Maharashtra and then undivided Andhra Pradesh over sharing of Krishna river water.

• The KWDT I (Bachawat commission) in its final award in 1973, divided the share of water between the three states as Andhra Pradesh, Karnataka and Maharashtra.

• In April 2004, KWDT II, was constituted by the Government of India following requests by all three states mainly over the issue of Alamatti dam height issue.

• The KWDT II gave its draft verdict on 31 December 2010. The KWDT II set the next review of water allocations after the year 2050.

-What is the current case?

• Andhra Pradesh and Telangana in their current petition have sought fresh allocation of Krishna River water among all four riparian states.

• According to them, Section 89 in the Andhra Pradesh Reorganisation Act, 2014 calls for redistribution of Krishna water among all the four riparian States not just between both of them.

-The judgment

• The tribunal observed that the section 89 of AP reorganisation act 2014 was not applicable to Maharashtra and Karnataka.

• Allocations made on the basis of water utilisations outside the Krishna basin were valid on historic grounds.

• AP and Telangana have to share water that was allocated to the undivided AP, nothing more or nothing less.

• A claim made by Telangana that AP was bifurcated because of inequitable allocation of the Krishna river water was thrashed by the tribunal.

• The tribunal said that AP was divided not because of unequal distribution of water, but to fulfill the political aspirations of the people of TG.

-Way forward

• One solution can be to bring water under concurrent list and according to Mihir shah report central water authority can be constituted to manage rivers.

• Centre can play the role of impartial arbitrator. This role cannot be done by courts as this is a political question with political consequences.

• A Parliamentary Standing Committee on Water Resources too has stated the need for bringing the subject in the Concurrent List.

• It also urged the Centre to initiate “earnest” efforts to build a national consensus for bringing water in the Concurrent List of Constitution so that a comprehensive plan can be prepared for water conservation.

**Green train corridors**

The Indian Railways has declared the Okha-Kanalus (141 Kms) and Porbandar-Wansjaliya (34 Kms) sections of Gujarat in Western Railway as the Green Train Corridors.

What are Green train corridors?

Green Train Corridors are sections of the railways which will be free of human waste on the tracks.

How is this being achieved?

This is being achieved by the installation of bio-toilets in all coaches of Indian Railways.

Background:

Railways have taken up a mammoth task of providing human discharge free bio-toilets in all its coaches to make the entire railway track a green corridor by 2020. Railways have already provided around 48,000 bio-toilets in about 14,000 passenger coaches.

The 114-km stretch in Tamil Nadu between Rameswaram and Manamadurai had been identified as a Human Waste Discharge Free Train Corridor of Southern Rly and was formally inaugurated as the first green corridor in July this year.

It is part of Swachh Bharat Mission;

Bio-toilets:

The technology of environment-friendly bio-toilets has been developed jointly by the Indian Railways and the Defence Research & Development Organisation (DRDO) through an MoU.

These toilets function in a manner that the human waste is collected in tanks below the toilets and the same is decomposed by the use of various bacteria.

**Facts for Prelims**

**International Conference on Voter Education:**

* The first ever Global Conference on Voter Education titled ‘Voter Education for Inclusive, Informed and Ethical Participation’ is being held in New Delhi.
* It is being organized by the Election Commission of India (ECI) in association with UNDP.
* Motto – “No Voter to be Left Behind”.
* This Conference represents nearly 40% of the world’s population under a single roof, bears the testimony to the importance of the Conference on the world stage.
* People are at the center of focus of this conference and deliberations would be held in great detail so as to adopt best practices across the world to ensure Voter Education and maximum Electoral Participation of the People.
* Participants are also planning to establish a Global Knowledge Network on Voter Education, VoICE.NET, which will be an innovative wide platform to share knowledge resources, interact on discussion board, sharing platform for events and practices in various countries and also extend knowledge and resource support to all stakeholders.

**2nd joint tactical exercise by India and China:**

* As part of the ongoing initiative to enhance interaction and cooperation between India and China, under the provisions of Border Defense Cooperation Agreement, 2013, the Indian and Chinese armies recently held Second Joint Exercise “Sino India Cooperation 2016”. It was held in Ladakh.
* During the day long exercise on Humanitarian Aid and Disaster Relief (HADR) a fictitious situation of earthquake striking an Indian Border village was painted. Thereafter joint teams carried out rescue operations, evacuation and rendering of medical assistance.
* The exercise is aimed at increasing the level of trust and cooperation between the two border guarding forces along the LAC in Eastern Ladakh.
* The joint exercise, compliments the Hand in Hand series of the India -China joint exercises and the effort of both the nations to enhance cooperation and maintain peace and tranquility along the border areas of India and China.

**INS Tihayu:**

* The Indian Navy has commissioned the highly manoeuvrable fast attack craft INS Tihayu at the Eastern Naval Command.
* INS Tihayu is the second ship of the four follow-on Water Jet Fast Attack Craft (FO-WJFAC), being built by M/s Garden Reach Shipbuilders and Engineers Ltd (GRSE).
* Conceived, designed and built indigenously, the commissioning of this ship completes the addition of another chapter to the nation’s ‘Make in India’ initiative and indigenisation efforts in the field of warship design and construction.
* Named after Tihayu island (presently known as Katchal island) in the Nicobar group, the 320-tonne INS Tihayu, measuring 49 meters can achieve speeds in excess of 35 knots.
* The ship is capable of operating in shallow waters at high speeds and is equipped with enhanced fire power. Built for extended coastal and offshore surveillance and patrol the warship is fitted with advanced MTU engines, water jet propulsion and the latest communication equipment.

**Smarter railway stations:**

* A Memorandum of Understanding (MoU) has been signed between the Urban Development Ministry and the Railways to redevelop railway stations and surrounding areas under the Smart City plan.
* To begin with, 100 railway stations and an adjoining area of 300-800 acres would be redeveloped in the Smart Cities and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) Cities plans.
* At present, railway stations in 10 cities could be taken up for the redevelopment with the involvement of the National Buildings Construction Corporation (NBCC). They are Varanasi, Sarai Rohilla (Delhi), Bhubaneswwar, Lucknow, Varnasi, Jaipur, Kota, Thane, Margao (Goa), Tirupati and Puducherry.
* Countries like Germany, France, Japan, South Korea, the U.K. and Belgium have shown interest in the redevelopment of railway stations.
* The scope of the MoU will be extended to over 500 cities in time. The cost of redeveloping about 500 acres in the Smart City Plans of 60 approved cities is approximately Rs. 1,500 crore.
* The validity of the MoU is five years and can be extended with the consent of both the ministries.

**Insights Daily Current Affairs, 21 October 2016**

**Pakistan warns India against breaching Indus Water Treaty**

Amid reports that India might revisit the key Indus Water Treaty, Pakistan has warned “appropriate action” if India violated the Treaty and said it was closely monitoring the situation.

About the treaty:

The Indus river basin spans parts of 4 countries (Afghanistan, Pakistan, India and China) in an area that is more than 30% arid.

* Beas, Ravi, Sutlej, Indus, Chenab and Jhelum from the Indus water system that flows from India to Pakistan.
* Signed in 1960 by then Prime Minister Jawaharlal Nehru and then Pakistan President Ayub Khan, the treaty allocates 80% of water from the six-river Indus water system to Pakistan.
* Under the treaty, control over six north Indian rivers were divided between the two countries. India got control over the rivers Beas, Ravi and Sutlej whereas Pakistan got control over Indus, Chenab and Jhelum.
* It was brokered by the World Bank. The Treaty also provides arbitration mechanism to solve disputes amicably.
* A Permanent Indus Commission was set up as a bilateral commission to implement and manage the Treaty. The Commission solves disputes arising over water sharing.

Sources: the hindu.

*Paper 1 Topic: Social empowerment, communalism, regionalism & secularism.*

**Triple talaq a highly misused custom: NCW**

Asking the government to scrap the triple talaq system to protect the rights of Muslim women, the National Commission of Women (NCW) has observed that the system was a “highly misused” custom.

* The commission also observed that this issue cannot be linked to the Uniform Civil Code.
* The commission has received several representations from Muslim women who said they felt “disempowered” because of the practice of triple talaq.

What is triple talaq?

‘Triple Talaq’ is a procedure of divorce under the Sharia Law which is a body of the Islamic law. Under this, a husband can divorce his wife by pronouncing ‘Talaq’ thrice.

Why triple talaq should be abolished?

* According to a study, 92% of Muslim women in India want oral triple talaq to go. Because there are several instances where ‘triple talaq’ has enabled husbands to divorce their wives arbitrarily, devoid of any substantiation.
* Oral talaq or ‘triple talaq’ delivered through new media platforms like Skype, text messages, email and WhatsApp have become an increasing cause of worry for the community.
* The ‘triple talaq’ has been abolished in 21 countries including Pakistan, but is still prevalent in India.
* These practices are also against constitutional principles such as gender equality, secularism, international laws etc.
* The government also argues that when these practices are banned in Islamic theocratic countries, the practices could have absolutely no base in religion and are only prevalent to permit the dominance of men over women.

About NCW:

The National Commission for Women (NCW) is a statutory body of the Government of India, generally concerned with advising the government on all policy matters affecting women.

* It was established in January 1992 under the provisions of the Indian Constitution, as defined in the 1990 National Commission for Women Act.
* The objective of the NCW is to represent the rights of women in India and to provide a voice for their issues and concerns.
* The commission regularly publishes a monthly newsletter, Rashtra Mahila in both Hindi and English.

**HDFC raises Rs 500 crore via masala bonds**

Mortgage lender HDFC has raised Rs 500 crore through the sale of Masala Bonds. HDFC has raised a total of Rs 5,000 crore through issuance of rupee-denominated bonds in four tranches.

What are Masala Bonds?

The rupee-denominated bonds or masala bonds are instruments through which Indian entities can raise funds by accessing overseas capital markets, while the bond investors hold the currency risk.

Why is it important?

Masala bonds, if they take off, can be quite a significant plus for the Indian economy. They are issued to foreign investors and settled in US dollars. Hence the currency risk lies with the investor and not the issuer, unlike external commercial borrowings (ECBs), where Indian companies raise money in foreign currency loans.

While ECBs help companies take advantage of the lower interest rates in international markets, the cost of hedging the currency risk can be significant. If unhedged, adverse exchange rate movements can come back to bite the borrower. But in the case of Masala bonds, the cost of borrowing can work out much lower.

**Facts for Prelims**

**World’s largest outdoor air purifier:**

* China is all set to deploy the world’s largest outdoor air purifier.
* It is designed by a Dutch engineer.
* It will be deployed in its smog-hit capital Beijing.
* The 7 metre tall tower can capture about 75% of PM 2.5 and PM 10 tiny particles in its vicinity and then release purified air to create a “bubble” of fresh air around it.
* The tower can clean 30,000 cubic metres of air per hour through its patented ozone-free ion technology.

**Kashmir’s Red Stag critically endangered:**

* In order to get more attention and protection to Kashmir’s Red stag, the International Union for Conservation of Nature (IUCN) has decided to put Red Stag on the critically endangered species list.
* The organisation is also aiming to enhance the conservation efforts to increase its declining population.
* It is listed under Schedule-I of the Indian Wildlife (Protection) Act, 1972 and J&K Wildlife (Protection) Act, 1978 and has also been listed among the top 15 species of high conservation priority by the Government of India.
* The cited reasons for the decline in its population are said to be habitat destruction, over-grazing by domestic livestock, and poaching.

**Insights Daily Current Affairs, 22 October 2016**

**Central assistance for 99 prioritized irrigation projects under AIBP**

The government has released the first installment of Rs. 1500 crore to the states as central assistance for 99 prioritized irrigation projects under Accelerated Irrigation Benefits Program (AIBP).

* This amount has been released for 50 projects in the states of Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Odisha, Punjab, Rajasthan and Telangana.

Background:

Total funds required for completion of all the 99 identified projects have been estimated at Rs.77595 crore. These projects will cover all most all drought prone districts of 18 States of country and will also go a long way to contain the incident of suicide by farmers.

About AIBP:

Central Government launched the AIBP in the year 1996-97 to provide Central Assistance to major/medium irrigation projects in the country, with the objective to accelerate implementation of such projects which were beyond resource capability of the States or were in advanced stage of completion.

* Priority was given to those projects which were started in Pre-Fifth and Fifth Plan period and also to those which were benefiting Tribal and Drought Prone Areas. From the year 1999-2000 onwards, Central Loan Assistance under AIBP was also extended to minor surface irrigation projects (SMI) of special category States.
* Later, during 2015-16, PMKSY was conceived amalgamating ongoing schemes –
  + Accelerated Irrigation Benefit Programme (AIBP) of the Ministry of Water Resources
  + Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR)
  + On Farm Water Management (OFWM) of Department of Agriculture and Cooperation (DAC).
* The scheme will be implemented by-
  + Ministries of Agriculture,
  + Ministries of Water Resources
  + Ministries of Rural Development.
* The major objective of PMKSY is to –
  + achieve convergence of investments in irrigation at the field level,
  + expand cultivable area under assured irrigation,
  + improve on-farm water use efficiency to reduce wastage of water
  + enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop).`

-Background

• Of the nearly 142 million hectares of net sown area, only about 64 million hectares, less than half, has assured access to irrigation facilities. The rest still depend on rainwater.

• Moreover, even within the overall irrigated land, nearly 60 per cent is based on pumped ground-water, banking on free or highly-subsidised power provided to farmers in most states, thereby putting further pressure on a fast-depleting critical resource

-Areas of concern

• One of the major reasons for the projects to remain incomplete is inadequate release of funds by central government.

• Other issues include time and cost overruns in most of the projects, problems in land acquisition and technical difficulties like constructing tunnels in some places.

• A government survey of the projects has shown utilisation gaps – the difference between the irrigation potential created and the area actually being irrigated – of between 25 to 55 per cent. That means these projects are serving substantially lower area and lesser number of farmers that they are meant to do.

-Other Steps taken by the Govt.

• A dedicated irrigation fund has been created under the National Bank for Agriculture and Rural Development (NABARD), which has been asked to issue tax free bonds to borrow money.

• An initial corpus of Rs 20,000 crore has already been set up through the budget, which NABARD can leverage to mobilize further money from the market.

• The government has now asked the Central Water Commission and other agencies to take up 50 out of the 143 completed projects each year and work towards increasing their efficiencies.

• Each of these projects would now also have water user associations that will decide on how the water is distributed to every claimant in the area.

-Way forward

• There should be provisions for online monitoring as well as physical monitoring of the projects for ensuring their completion

**Western Zonal Council Meeting held in Mumbai**

The 22nd meeting of the Western Zonal Council consisting of the States of Maharashtra, Gujarat, Goa and Union Territories of Daman & Diu and Dadra & Nagar Haveli was recently held at Mumbai under the chairmanship of Shri Rajnath Singh, Union Home Minister.

Key facts:

* The meeting was attended by the Chief Ministers and Ministers of these States and Administrators of Union Territories as well as senior officers of Central and State Governments.
* The Council reviewed issues which relate to coastal security, internal security, issuance of bio-metric identity cards to fishermen & issue of card readers, formulation of plans for countering terrorism, modernization of police force etc.
* Other important issues discussed were Pradhan Mantri Awas Yojna (Urban) Mission, surplus lands of Central Government for ‘Housing for All: 2022’ and providing shelters to the urban homeless.
* Issues relating to checking pollution in Daman Ganga and Kolak river due to discharge of untreated effluents from Vapi industrial area were also deliberated in detail.

About **ZONAL Councils**:

Five Zonal Councils (Northern, Western, Eastern, Central and Southern) were set up under the States Reorganization Act, 1956 to foster Inter-State co-operation and co-ordination among the States.

* The Zonal Councils are mandated to discuss and make recommendations on any matter of common interest in the field of economic and social planning, border disputes, linguistic minorities or inter-State transport etc.
* They are regional fora of cooperative endeavor for States linked with each other economically, politically and culturally.
* Being compact high level bodies, specially meant for looking after the interests of respective Zones, they are capable of focusing attention on specific issues taking into account regional factors, while keeping the national perspective in view.

**India Signs Guarantee Agreement with the World Bank on Phase 3 of Eastern Dedicated Freight Corridor**

A Guarantee Agreement for World Bank (IBRD) lending of US$ 650 million to the Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL) for Eastern Dedicated Freight Corridor-III (EDFC-III) Project has been signed between the Government of India and the World Bank.

About Eastern Dedicated Freight Corridor-III project:

The objective of the EDFC-III Project is to augment rail transport capacity, improve service quality and enhance freight carriage throughput on the 401 km Ludhiana-Khurja section of the Eastern Dedicated Freight Corridor.

* It also aims to develop institutional capacity of DFCCIL to build, maintain and operate the entire DFC network.
* This project is in continuation of Phase-I and II of the EDFC Projects being implemented by the DFCCIL with the World Bank loan of US$ 975 million and US$ 1100 million respectively on the Dadri-Khurja-Kanpur and Kanpur-Mughal Sarai stretches of the Eastern Rail Corridor (Ludhiana-Delhi-Kolkata).

Significance of this project:

* The project will directly benefit the power and heavy manufacturing industries of Northern and Eastern India, which rely on railway network for transportation of their material inputs and also for the distribution of bulk processed and semi-processed commodities and consumer goods.
* Railway passengers will also be benefitted through decongestion of the existing passenger lines.
* It also aims to develop institutional capacity of DFCCIL to build, maintain and operate the entire DFC network
* It will enhance rail transport capacity, improve service quality and boost freight carriage on the corridor.

-phase 1: Dadri-Khurja-Kanpur

-Phase 2: Kanpur-Mughal Sarai

-Phase 3: Ludiana-Khurja

-overall: Ludhiana-Delhi-Kolkata

**Loan to National Water Development Agency (NWDA) by NABARD**

NABARD has sanctioned loan worth Rs. 19,702 crore to National Water Development Agency (NWDA) for 50 irrigation projects from 11 States under Long Term Irrigation Fund (LTIF). It is part of the government’s vision to double the farmers’ income by 2022.

* This loan is part of the Central share of assistance to State Governments and will ensure front loading of resources so that the identified incomplete irrigation projects under Pradhan Mandtri Krishi Sinchai Yojna (PMKSY) are executed in time.
* This would help complete not only the irrigation projects but also the Command Area Development works which are central to ensure full utilisation of irrigation potential so created.
* Long Term Irrigation Fund (LTIF) was set up by NABARD.

About NABARD:

It is an apex development and specialized bank established in July 1982 by an act by the parliament of India.

* Its main focus is to uplift rural India by increasing the credit flow for elevation of agriculture & rural non farm sector.
* It was established based on the recommendations of the Committee set up by the Reserve Bank of India (RBI) under the chairmanship of Shri B. shivaraman.
* It replaced the –
  + Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of RBI;
  + Agricultural Refinance and Development Corporation (ARDC).
* It has been accredited with “matters concerning policy, planning and operations in the field of credit for agriculture and other economic activities in rural areas in India”.
* NABARD is active in developing financial inclusion policy and is a member of the Alliance for Financial Inclusion.
* It also looks after the development of the cottage industry, small industry and village industry, and other rural industries.

Sources: pib.

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

**Civil Aviation Ministry’s Regional Connectivity Scheme “UDAN” Launched**

The Centre has unveiled a regional connectivity scheme, known as UDAN (Ude Desh ka Aam Nagrik), with flights priced at Rs.2,500 for one hour of flying time to and from regional airports.

About the scheme:

A “first of its kind” in the world, UDAN (Ude Desh Ka Aam Naagrik) will be based on market mechanism as well as bidding for a minimum of 50% seats in the participating airline’s flight and the rest would be market-based pricing.

The scheme UDAN envisages providing connectivity to un-served and under-served airports of the country through revival of existing air-strips and airports. The scheme would be in operation for a period of 10 years.

Key features of the scheme:

* The UDAN scheme will be applicable on flights which cover between 200 km and 800 km with no lower limit set for hilly, remote, islands and regions which are security sensitive.
* Under the UDAN scheme, the flights are bound to connect at least one RCS airport (underserved and unserved airports).
* The RCS caps fares and also offers a ceiling for the VGF available for each route. Which means the airlines cannot charge beyond the caps specified from passengers.
* For the shortest route under the scheme fare has been capped at Rs 1,420. For longest route, fare has been capped ar Rs 3,500.
* The Centre has also decided to provide concessions such as 2% excise on Value Added Tax (VAT) and service tax at 1/10th.
* State government are bound to provide free security and fire service, utilities at concessional rates and reduce VAT on ATF to 1%.
* There will be no landing charges, parking charges and Terminal Navigation Landing Charges will be imposed for RCS flights.

Sources: the hindu.

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

**Rules for Rs. 40,000 cr. forest fund to be ready in a month for CAMPA Fund**

The Environment Ministry will shortly frame rules to help States use a Rs. 40,000 crore corpus earmarked to restore forests. Making these rules are a follow-up to the Compensatory Afforestation Fund Bill passed by Parliament in the monsoon session.

Key features of the Bill:

* The Bill establishes the National Compensatory Afforestation Fund under the Public Account of India, and a State Compensatory Afforestation Fund under the Public Account of each state.
* These Funds will receive payments for:
  + compensatory afforestation
  + net present value of forest (NPV), and
  + other project specific payments.
* National : State Fund = 10:90%= receipt of payments;
* These Funds will be primarily spent on –
  + afforestation to compensate for loss of forest cover, regeneration of forest ecosystem,
  + wildlife protection
  + infrastructure development.
* The Bill also establishes the National and State Compensatory Afforestation Fund Management and Planning Authorities to manage the National and State Funds.

Significance of this bill:

* With this, most Indian States stand to receive funds worth Rs. 6,000 crore per annum for conservation, protection, improvement and expansion of forest and wildlife resources.
* This will also help create more than 15-crore man days of direct employment. Many of these jobs will be in tribal and backward areas.
* Apart from creation of direct employment, utilisation of these amounts will result in increased availability of timber and various other non-timber forest products, and will thus help in improvement of the overall living standards of the forest dependent communities.

**ICGS Atulya and  Aryaman commissioned into service**

-developed by Cochin Shipyard;

-they are Fast Patrol Vehicles;

- Special features include Integrated Bridge Management System (IBMS) and Integrated Machinery Control System (IMCS).

Integrated bridge system (IBS) is a kind of navigation management system which links other systems to provide all the details pertaining to ship’s navigation at one place. (in box)

-significance-

* The ships are equipped with state-of-the-art machinery, navigational equipment and advanced communication
* They can be used for various jobs such as surveillance, search, rescue and interdiction

**NHRC Data for 2015 finds UP Worst**

* UP has highest no. of cases of human rights violation lodged by the National Human Rights Commission (NHRC) in the past year, with 44% of the total number of cases registered with the NHRC pertaining to the State.
* UP is followed by Odisha, Haryana, Delhi, Bihar and Rajasthan.
* U.P. also had the most number of –
  + deaths in judicial custody and police custody
  + cases of child labour and bonded labour;

**Insights Daily Current Affairs, 24 October 2016**

**Monitoring Committee to Oversee Outbreak of H5 Avian Influenza**

Acting swiftly on the reports of mortality among the birds in National Zoological Park, Delhi NCR and other parts of the country due to H5 Avian Influenza Virus, the centre has constituted a monitoring committee for overseeing outbreak of H5 Avian Influenza in the country.

* The committee will oversee the daily incidences of H5 Avian Influenza in National Zoological Park and other Zoos of the country and submit a daily report to the Environment Minister.
* To control the disease actions including active surveillance and bio-security measures are being taken up.

Avian influenza or Bird flu:

Avian influenza, commonly called bird flu, is an infectious viral disease of birds with a tendency of causing large-scale outbreaks of serious disease.

Although most influenza viruses do not infect humans, A(H5N1) and A(H7N9) have caused serious infections in people.

Bird flu symptoms:

* Fever, cough, sore throat, muscle, body aches, nausea can lead to severe breathing problems, pneumonia, and acute respiratory distress syndrome.

Treatment:

* Human infections with bird flu viruses usually can be treated with the same prescription drugs that are used to treat human seasonal flu viruses.

Risk factors involved:

According to WHO, a few A(H5N1) human cases have been linked to consumption of dishes made of raw, contaminated poultry blood.

However, slaughter, handling carcasses of the infected poultry, and preparing poultry for daily consumption in households are likely to be risk factors.

*Paper 3 Topic: Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.*

**‘One India’ push for ease of business**

The Centre is working with State governments to introduce a ‘One India’ concept, the most ambitious ‘ease of doing business’ initiative so far.

What is it all about?

The ‘one-form-one-portal’ model is aimed at attracting huge investments. Under this model, the processes will be simplified to an extent where investors will need to fill only a single e-form for investing and doing business anywhere in India.

* The proposed concept will make it easy for investors to even change plans midway and shift projects to different locations in India where it is easier to do business.

Why such a reform is necessary?

Currently, firms are mandated to complete multiple forms at the Central and State-levels, and it gets more complicated as each State has different requirements and regulations.

Background:

The reform plan is among steps aimed at helping raise India’s global ranking on the World Bank Group’s ‘Doing Business’ index — from 130 in 2016 — to the top 50 among the 189 economies featured on the list.

Way ahead:

The centre has begun talks with the states, and will soon hold discussions with the private sector and users of government services in this regard. As an initial measure, a draft ‘Common Application Form’ is being circulated among states for their feedback.

Sources: the hindu.

*Paper 3 Topic: Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.*

**Full convertibility on capital account unlikely for few years**

The government has clarified that it is not looking at full capital account convertibility for the next few years.

Background:

Raghuram Rajan, the previous Reserve Bank of India governor, had said that the central bank was looking at bringing in capital account convertibility in a few years. However, the debate has acquired a new dimension with the International Monetary Fund (IMF) recently becoming more cautious about its benefits for developing economies.

What are capital controls?

Capital controls are used by the state to protect the economy from potential shocks caused by unpredictable capital flows.

What does capital account convertibility mean?

Essentially, it means freedom to convert local financial assets into foreign ones at market-determined exchange rates.

What can it do?

* It can lead to free exchange of currency at lower rates.
* Also, it can result in unrestricted mobility of capital.

How does it benefit a nation?

It can trigger stepped up inflow of foreign investment.

Transactions also can become much easier, and occur at a faster pace.

What are the negatives?

It could destabilise an economy especially if there is massive capital flows in and out of the country. Currency appreciation/depreciation could affect the balance of trade.

Where does India stand now?

India currently has full convertibility of the rupee in current accounts such as for exports and imports. However, India’s capital account convertibility is not full. There are ceilings on government and corporate debt, external commercial borrowings and equity.

**Centre plans to link varsity autonomy to performance**

The Human Resource Development (HRD) Ministry is considering linking the autonomy of higher education institutions to their performance as measured by the National Institutional Ranking Framework (NIRF). Greater autonomy could imply a number of things, including the complete freedom to have their own syllabi and curricula.

The government is thinking of dividing universities into three categories — A, B and C — on the basis of their NIRF rankings.

1. The A category will comprise institutions with high NIRF rank and these will be highest on the autonomy scale
2. The B category will comprise middle-ranking institutions with part autonomy but also government regulation.
3. Category C will mean institutions with low ranking that will require greater regulation and hand-holding for improvement.

Background:

As per the 2016 rankings, IIT Madras topped among engineering colleges, followed by IITs at Mumbai, Kharagpur, Delhi, Kanpur and Roorkee. IIT Madras had a score of 89.41.

Among universities, the Indian Institute of Science, Bengaluru, topped, followed by the Institute of Chemical Technology in Mumbai, Jawaharlal Nehru University in Delhi, Hyderabad University and Tezpur University. Among management schools, IIM Bengaluru was ranked first with a score of 93.04, followed by the IIMs at Ahmedabad, Kolkata, Lucknow, Udaipur and Kozhikode.

The next round of NIRF rankings will be published on the first Monday of April 2017.

What is NIRF?

The National Institutional Ranking Framework (NIRF) has been approved by the MHRD and was launched in September, 2015. This framework outlines a methodology to rank institutions across the country. The methodology draws from the overall recommendations and broad understanding arrived at by a Core Committee set up by MHRD, to identify the broad parameters for ranking various universities and institutions.

* The parameters broadly cover –
  + “Teaching, Learning and Resources”,
  + “Research and Professional Practices”,
  + “Graduation Outcomes”,
  + “Outreach and Inclusivity”
  + “Perception”.
* NIRF has been given the responsibility of ranking institutions that have applied and submitted their data. The ranking of the Institutions will be done based on the parameters proposed by NIRF for different disciplines.

**India falls short in female literacy**

Data from new research on female literacy show that India’s school education system is under-performing in terms of quality when compared to its neighbours, Pakistan, Bangladesh and Nepal.

* The research was carried out by New York-based International Commission on Financing Global Education Opportunity. The research studies changes in female literacy over a number of schooling years.

Highlights:

* The proportion of women who completed five years of primary schooling in India and were literate was 48%, much less than 92% in Nepal, 74% in Pakistan and 54% in Bangladesh.
* Female literacy rates went up by one to 15% after completing two years of schooling. Corresponding numbers for Pakistan and Nepal were 3 to 31% and 11 to 47% respectively. This implies that schooling is roughly twice as productive at generating literacy for women during the early grades in Pakistan when compared to India.
* India ranks low in global indices of female literacy as well. If countries are ranked by the earliest grade at which at least half of the women are literate — a proxy for quality of learning — India ranks 38th among the 51 developing countries for which comparable data is available. Indonesia, Rwanda, Ethiopia and Tanzania — all rank higher than India.

Background:

For this research, the authors devised a way to measure the quality of education around the world, with a specific focus on girls, using data from nationally representative Demographic and Health Surveys (DHS) — one of the most comparable data sources on living standards in the developing world.

Sources: the hindu.

*Paper 3 Topic: Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security; money-laundering and its prevention.*

**NCB to seize 500 Bitcoins used in drug trafficking**

After cracking down on drug trafficking being conducted through the ‘darknet’ recently, the Narcotics Control Bureau (NCB) is set to freeze about 500 Bitcoins in the accounts of traffickers, the first ever seizure of the virtual, unregulated currency in a criminal probe in the country.

-It involves trafficking of drugs and narcotic supplements over the cryptic form of internet called ‘Darknet’ using the illegal payment method of Bitcoins to escape from detection by investigative agencies.

-‘Darknet’ refers to a secret internet network which can only be accessed with specific software, configurations and authorization. It is difficult to track using usual communications protocols and ports.

What is bitcoin?

It is an attempt, using blockchain technology, to create a set of shares in a trading entity that had an initial set value and fixed number (much like the face value and number of shares offered in an initial public offering), in the hope that these shares would become the medium of exchange through which people trade goods and services.

Since the number of shares is fixed, demand for them goes up over a period of time as more and more people use the shares to settle their transactions; so, the bet is that each bitcoin’s value goes up stratospherically since there will never ever be any more bitcoins issued.

Sources: the hindu.

**Facts for Prelims**

* India has won the 2016 Kabaddi World Cup by defeating Iran. It was India’s **third** consecutive Kabaddi World Cup in the Standard Style version of Kabaddi. Earlier India had won in 2004 and 2007.

**Insights Daily Current Affairs, 25 October 2016**

**‘Mobile Air Dispensary’ for remote areas of the North-East**

Union Minister of State for Development of North Eastern Region (DoNER), Dr Jitendra Singh has proposed “Mobile Air Dispensary” service for remote and far-flung areas of Northeast.

Key facts:

* The initiative involves a mobile dispensary in a Helicopter with a doctor, necessary equipment and medicines that can fly to remote and far-flung on regular basis and also, as and when required.
* The idea takes its inspiration from “Royal Flying Service of Australia”, popularly known as “Flying Doctors”, which is meant to provide aid and primary health care service in rural and remote areas.

Significance of this project:

This initiative is helpful particularly in areas from where patients find it difficult to reach a dispensary. With this, a doctor with dispensary can reach them.

Sources: pib.

*Paper 3 Topic: awareness in space.*

**ISRO starts landing tests for Chandrayaan-2 mission**

The Indian Space Research Organsiation has started a series of ground and aerial tests linked to the critical Moon landing of Chandrayaan-2 in Karnataka.

Key facts:

* The tests are being conducted at ISRO’s science city located in Karnataka.
* ISRO Satellite Centre or ISAC, the lead centre for the second Moon mission, has artificially created close to ten craters to simulate the lunar terrain and test the Lander’s sensors.
* A small ISRO aircraft has been carrying equipment with sensors over these craters to plan the tasks ahead.
* In the coming months, ISAC would conduct many tests: on avionics and electronics; testing the Lander’s legs, followed by a combined full test.

About Chandrayaan-2:

Chandrayaan-2 is tentatively set for late 2017 or early 2018 and includes soft-landing on Moon and moving a rover on its surface.

* It is an advanced version of the previous Chandrayaan-1 mission.
* It consists of an orbiter, lander and rover configuration.
* The Orbiter spacecraft when launched from Sriharikota will travel to the Moon and release the Lander, which will in turn deploy a tiny Rover to roam the lunar surface — all three sending data and pictures to Earth.
* It is planned to be launched as a composite stack into the earth parking orbit (EPO) of 170 X 18,500 km by GSLV-Mk II.

Sources: the hindu.

*Paper 3 Topic: Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security; money-laundering and its prevention.*

**Cybersecurity in Banks: Debit card data theft issue**

-Background

• It was recently revealed that around 19 Indian Banks faced a series of data theft in last 6 months. It is the biggest debit card fraud in Indian history.

• The Banks have recalled and blocked more than 32 lakh debit cards.

• This has led to banking fraud of around Rs. 1.3 crores. The potential loss could be much more than this.

• The probe by National Payments Corporation of India (NPCI), which has oversight over all the retail transactions, found a malware-induced security breach in the systems of Hitachi Payment Services, which provides ATMs, point of sale and other services in India.

-Implications -The government and RBI are putting efforts to harness digital revolution to bring about socio-economic changes.

• The fraud, thus, exposes the vulnerability of Indian retail financial structure.

• It shakes the faith and confidence of the people in the financial structure.

• If not tackled immediately with effective means this could be a huge setback for the government.

-RBI’s efforts to address the issue cyber crimes

• In June 2016, RBI issued instructions on a cyber security framework in banks, asking them to-

* put in place a board-approved cyber security policy,
* prepare a cyber crisis management plan,
* make arrangement for continuous surveillance.
* share unusual cyber security incidents with RBI.

• RBI has set up an expert panel on IT Examination and Cyber Security to provide assistance in banks’ cyber security initiatives

• It also proposes to cover, by 2017-18, all banks under a detailed IT examination programme launched recently.

-Other measures needed

• It is the duty of the banks to integrate inter-generational legacy systems across branches, ATMs and online banking networks into one seamless and secure whole.

• There is a need to put cyber security at top priority of banks. Top managements at lenders should reappraise their cyber culture, heed warnings and alerts promptly, and address shortcomings.

-Concluding Remarks

Going Digital is an opportunity and also a threat, but it is still necessary to adopt it because of the convenience it brings. But we need better fraud management and security in place.

The Reserve Bank of India has clarified that the number of debit cards misused in the recent revelation of fraud was ‘few’.

Background:

Recently, India’s largest bank, State Bank of India, said it had blocked close to 6 lakh debit cards following a malware-related security breach in a non-SBI ATM network. Several other banks, such as Axis Bank, HDFC Bank and ICICI Bank, too have admitted being hit by similar cyber attacks — forcing Indian banks to either replace or request users to change the security codes of as many as 3.2 million debit cards over the last two months.

The issue is currently being investigated by an approved forensic auditor, under PCI-DSS (Payment Card Industry-Data Security Standard) framework.

What is PCI DSS?

The Payment Card Industry Data Security Standard (PCI DSS) is a widely accepted set of policies and procedures intended to optimize the security of credit, debit and cash card transactions and protect cardholders against misuse of their personal information. The PCI DSS was created jointly in 2004 by four major credit-card companies: Visa, MasterCard, Discover and American Express.

The PCI DSS specifies and elaborates on six major objectives. These include:

* A secure network must be maintained in which transactions can be conducted. This requirement involves the use of firewalls that are robust enough to be effective without causing undue inconvenience to cardholders or vendors. In addition, authentication data such as personal identification numbers (PINs) and passwords must not involve defaults supplied by the vendors. Customers should be able to conveniently and frequently change such data.
* Cardholder information must be protected wherever it is stored. Repositories with vital data such as dates of birth, mothers’ maiden names, Social Security numbers, phone numbers and mailing addresses should be secure against hacking. When cardholder data is transmitted through public networks, that data must be encrypted in an effective way.
* Systems should be protected against the activities of malicious hackers by using frequently updated anti-virus software, anti-spyware programs, and other anti-malware solutions. All applications should be free of bugs and vulnerabilities that might open the door to exploits in which cardholder data could be stolen or altered. Patches offered by software and operating system (OS) vendors should be regularly installed to ensure the highest possible level of vulnerability management.
* Access to system information and operations should be restricted and controlled. Cardholders should not have to provide information to businesses unless those businesses must know that information to protect themselves and effectively carry out a transaction. Every person who uses a computer in the system must be assigned a unique and confidential identification name or number. Cardholder data should be protected physically as well as electronically.
* Networks must be constantly monitored and regularly tested to ensure that all security measures and processes are in place, are functioning properly, and are kept up-do-date.
* A formal information security policy must be defined, maintained, and followed at all times and by all participating entities. Enforcement measures such as audits and penalties for non-compliance may be necessary.

Sources: the hindu.

*Paper 3 Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.*

**Urja Ganga**

-Recently Prime Minister Narendra Modi laid the foundation stone of Urja Ganga, the highly ambitious gas pipeline project in Varanasi, Uttar Pradesh.

-It aims to provide piped cooking (PNG) gas to residents of the eastern region of the country and CNG gas for the vehicles.

-Key Features

• The project envisages laying a 2,050-km pipeline connecting Jagdishpur (UP) to Haldia (West Bengal) by 2018.

•It will include –

* 5 states including UP, Bihar, Jharkhand, West Bengal and Odisha.
* 7 East India cities Varanasi, Jamshedpur, Patna, Ranchi, Kolkata, Bhubaneswar, Cuttack;

• The project is being implemented by state-run gas utility GAIL.

• The project augments existing GAIL’s network of trunk pipelines covering the length of around 11,000 km by 2540 km.

-Significance

• The project is considered as a major step towards collective growth and development of the Eastern region of India. Under it, overall 20 lakh households will get PNG connections.

• From Varanasi’s perspective, 50,000 households and 20,000 vehicles will get cleaner and cheaper fuel PNG and CNG gas respectively.

• Besides, LNG terminal at Dhamra will provide clean fuel to the Industrial Development of the Eastern states of Uttar Pradesh, Jharkhand, Bihar, West Bengal and Odisha.

• 25 industrial clusters in these 5 states will be developed using gas from this pipeline. Besides, 40 districts and 2600 villages will benefit from this project.

• It will also help in revival of defunct fertilizer plants in Barauni in Bihar, Gorakhpur in UP, Sindri in Jharkhand and Durgapur in West Bengal by supplying gas.

• It will also help in bringing natural gas based crematoriums at cremation grounds including Manikarnika and Harishchandra ghats in Varanasi. This will be good for environment.

**Era of e-postal ballots dawns, courtesy EC’s new initiative**

The government has amended rule 23 of the Conduct of Elections Rules, 1961 enabling service voters, including armed forces personnel, to cast their vote in elections through e-postal ballot.

* Through this move, the government has accepted a long-pending demand which will save valuable time.

How it will work?

Under the new rules, service voters, including personnel from armed forces, can now download the blank post ballot sent to them electronically, mark their preference and post the filled-up ballot back to their respective returning officers.

On a pilot basis, e-postal ballot system has been introduced for service voters consisting of armed police forces of the central government, other forces subject to the provisions of the Army Act, armed forces of a state serving outside that state, and those employed under the government of India in a post outside India.

Implications of this move:

* This would cut short the delay experienced in the present system of two-way transmission of ballot paper by the postal services.
* The armed forces personnel serving in remote and border areas would be greatly benefited since the present system of two-way transmission of ballot paper by the postal services has not been able to meet the expectations of the service voters.

Background:

The government had approached the Election Commission to help mitigate the difficulties faced by service voters while exercising their franchise. The issue had also come up before the Supreme Court where it was pleaded that an effective mechanism be created for armed forces personnel and their families to exercise their right to vote easily and effectively.

**Insights Daily Current Affairs, 26 October 2016**

**T.N. opposes Centre’s stand on tribunal**

Tamil Nadu has opposed the Centre’s view on the role of tribunal in inter-state river water disputes.

What has the Tamil Nadu said?

According to the Tamil Nadu state government, the position taken by the Centre that the Supreme Court has no power to judicially review the Cauvery tribunal’s 2007 award is tantamount to giving the tribunal “absolute, uncontrolled, uncanalised and unguided judicial power which negates the rule of law.”

Background:

The Centre had opposed the Supreme Court hearing appeals filed by Tamil Nadu, Karnataka and Kerala against the tribunal decision. According to the Centre, the Supreme Court was barred under Article 262 (3) and provisions of the Inter-State Water Disputes Act, 1956 from entertaining appeals under Article 136 against the Cauvery tribunal’s award.

What the law says?

Article 262, dealing with the adjudication of disputes relating to waters of inter-state rivers or river valleys, says:

* Parliament may by law provide for the adjudication of any dispute or complaint with respect to the use, distribution or control of the waters of, or in, any inter-state river or river valley.
* Notwithstanding anything in this constitution, parliament may by law provide that neither the Supreme Court nor any other court shall exercise jurisdiction in respect of any such dispute or complaint as is referred to in clause (1).

Pursuant to the power conferred by the Constitution (article 262), Parliament has enacted the Inter-State Water Disputes Act, 1956. Key features include:

* A State Government which has a water dispute with another State Government may request the Central Government to refer the dispute to a tribunal for adjudication.
* The Central Government, if it is of opinion that the dispute cannot be settled by negotiation, shall refer the dispute to a Tribunal.
* The Tribunal’s composition is laid down in the Act. It consists of a Chairman and two other members, nominated by the Chief Justice of India from among persons who, at the time of such nomination, are Judges of the Supreme Court.
* The Tribunal can appoint assessors to advise it in the proceedings before it.
* On the reference being made by the Central Government, the Tribunal investigates the matter and makes its report, embodying its decision. The decision is to be published and is to be final and binding on the parties.
* Jurisdiction of the Supreme Court and other courts in respect of the dispute referred to the Tribunal is barred.
* The Central Government may frame a scheme, providing for all matters necessary to give effect to the decision of the Tribunal. The scheme may, inter alia, provide for establishing an authority for implementing (section 6A).

Article 136: Special Leave Petitions are heard by the Supreme Court under Article 136(1) of the constitution. This provision enables the Supreme Court to grant “special leave to appeal from any judgment, decree, determination, sentence or order in any cause or matter passed or made by any court or tribunal in the territory of India”.

Sources: the hindu.

*Paper 1 Topic: Social empowerment, communalism, regionalism & secularism.*

**National tribal carnival**

The first National Tribal Carnival was recently inaugurated in New Delhi. The carnival seeks to promote a sense of inclusiveness among the tribals.

Key facts:

* Main purpose of the carnival is to promote a sense of inclusiveness among the tribals.
* About 1,600 tribal artists and around 8,000 tribal delegates from across the country took part in the carnival.
* Besides, eminent tribal personalities who have excelled in various fields like sports, arts and culture, literature, academics and medicine were also invited.
* The underlying idea is to preserve and promote various facets of the tribal life relating to culture, tradition, customs and their skills, and to expose it to the general public with a view to utilise the potential for overall holistic development of the Scheduled Tribes.
* Activities like displaying documents on traditional socio-culture aspects, exhibition of art/artifacts, cultural performances, demonstration of skills like sports, paintings, traditional healing practices, etc. were part of the event.
* There were workshops on issues like implementation of Panchayats (Extension to the Scheduled Areas) Act, 1996 (PESA), its benefit to tribal community and its drawbacks, implication and reservation of Forest Rights Act (FRA), 2006, in politics and recruitment.

Sources: pib.

*Paper 1 Topic: Effects of globalization on Indian society.*

**India moves up one place on ease of doing business rankings**

• The World Bank ranks the economies on their ease of doing business. A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm.

• The rankings are determined by sorting the aggregate distance to frontier scores on 10 topics, each consisting of several indicators, giving equal weight to each topic.

• India has ranked poorly on this ranking for past few years. In the recent rankings for 2017, it has moved one rank up to the 130th position.

• This marginal improvement came on the back of slight improvement in four indicators- getting electricity, enforcing contracts, trading across borders and registering property.

-Positives from the Report

• It recognizes reforms under four of the 10 headers which is highest ever achieved by India.

• The ‘distance to frontier’ (DTF) score-used by the WB to measure the distance between each economy and the best performance in that category-has improved for seven of those 10 headers.

-Should the marginal improvement be a matter of concern?

• India has improved by only one position. This is being looked by many as a matter of concern on account of two reasons:

* India has taken a number of economic reforms in the past year like enactment of bankruptcy code, GST, introduction of single window system for building plan approvals and online ESIC (Employees’ State Insurance Corporation) and EPFO (Employees’ Provident Fund Organisation) registrations etc. Thus, a better ranking was expected.
* Further, the present government aims to bring India in the top 50 economies in the Ease of Doing Business by 2018. The target seems extremely challenging now.

• However, the report does not truly represent the status of economic reforms taken by India. For instance:

* The Report accounts for reforms undertaken by 1st June 2016 only. As a result some of the key reforms like Insolvency and Bankruptcy Code were not included. India hopes to get a better ranking next year.
* Second, one particular change in the ranking methodology seems to have done considerable damage to India’s improvement prospects. India ranks fourth from the bottom under the header “paying taxes”. Inclusion of new criterion ‘post-filing index’ has much to contribute to this.
* Third, the rankings cover only the two cities of Delhi and Mumbai. However, the reforms are being carried on all across India. In fact, states like Andhra Pradesh, Telangana have done remarkable efforts in economic reforms.
* Fourth, there is increasing competition from other countries who are trying to improve their rankings as well. In fact, the report mentions that the number of countries that have implemented at least one reform have increased from 122 to 137. Thus, even though India might have improved its ease of doing business, it is not reflected in the ranking in the same sense.

• Further, even this ranking process has its limitations. The report clubs all the economies together. E.g. the emerging markets with advanced economies, the war-torn with peaceful ones etc. Such an approach gives a grand ranking system but is hardly useful in predicting, for instance, the flow of capital. Thus, while India may lag behind many countries in EoDB, it may still be a better destination for FDI etc.

-Way forward

• We need to learn from other countries like Georgia and Kazakhstan who have done extremely well in the rankings in a matter of few years. E.g. Georgia has improved from 100 to 16 in last 10 years.

• The DIPP is planning to appoint external agencies to help departments carry forward reforms, hold stakeholders consultations, and monitor implementation of reforms.

Key facts:

* New Zealand has replaced Singapore as the easiest place for doing business.
* New Zealand is followed by Singapore, Denmark, Hong Kong, South Korea and Norway.
* Performance of BRICS nations: Brazil-123, Russia-40, South Africa-74 and China-78.

**Workplace gender gaps persist: WEF Gender Gap Report**

-The World Economic Forum’s (WEF) Global Gender Gap Report 2016 was released recently.

- India has substantially improved its rank in the Global Gender Gap index — moving from 108th to 87th position within a year, according to a report released by the World Economic Forum (WEF).

-About the report-

* The report measured gender parity through four indices: health, education, economy and politics.
* In the latest edition, the report finds that progress towards parity in the key economic pillar of gender has slowed dramatically with the gap-which stands at 59%-now larger than at any point since 2008.
* progress on the gender equality front was actually slowing down and even reversing in some countries; it will take at least 170 years for women to earn as much as men and for them participate equally in the workforce – last year it had predicted these changes would take 118 years;
* Top 4 countries- Ireland, Finland, Norway and Sweden;

- India’s performance

• India is ranked 87 out of 144, improving from its 108 p osition in 2015.

• It has closed its gender gap by 2% in a year: its gap now stands at 68% across the four pillars

• The major improvement, however, has been in education, where it has managed to close its gap entirely in primary and secondary education.

• India is also among a group of countries that have made key investments in women’s education but have generally not removed barriers to women’s participation in the workforce.

**Facts for Prelims**

**Club Des Chefs Des Chefs:**

* It is the most exclusive group of chefs from around the world. The group recently paid a visit to PM Modi. The group that is in India, consists of chefs to heads of 16 countries. The group calls itself Club Des Chefs Des Chefs which translates to Club of the presidential chefs across the globe. The club is having its annual general assembly in India.
* The group of chefs head the most exclusive kitchens from around the world such as those in the White House and Buckingham Palace. The Chefs feed the world’s most powerful and influential people in the world.
* It’s an exclusive club because one can be part of it only if one is a chef to a head of state.

**Mitra Shakti 2016:**

* It is the fourth edition of the India-Sri Lanka Joint Military Exercise.
* It is being conducted at Sinha Regimental Centre in Ambepussa, Sri Lanka.
* The main focus of this edition of the joint exercise is to enhance inter-operability while carrying out Counter Insurgency (CI)/Counter Terrorism (CT) operations under the United Nations Mandate.
* The previous exercise with the Sri Lankan Army was successfully conducted in the month of September 2015 at Pune in India.

**Man Booker Prize 2016:**

* Paul Beatty has become the first US author to win the Man Booker Prize for his novel “The Sellout”.
* The Man Booker Prize is the world’s most prestigious English-language literary award.
* It was launched in 1969 and presented by the Man Group.
* The winner of the Man Booker receives £52,500, ($64,100, 59,000 euros).
* It was only opened to non-Commonwealth authors from 2013 — a decision that was highly controversial in Britain.

**Insights Daily Current Affairs, 27 October 2016**

**NSG: New Zealand to play ‘constructive’ role**

New Zealand PM John Key is on his visit to India. Recently, a meeting was arranged between New Zealand PM and Indian PM to discuss on India becoming a member of the Nuclear Suppliers Group. During this meeting, New Zealand has indicated that it will continue to contribute constructively in India’s bid.

Significance of this move:

This indicates that New Zealand is yet to change its hard-line position on only admitting signatories to the Non-Proliferation Treaty into the NSG, a group which works by consensus.

Also, this move comes in the run-up to a crucial NSG Consultative Group (CG) meeting to be held in Vienna specifically to consider whether countries that haven’t signed on to the NPT can be considered for membership.

Background:

New Zealand is part of a group called the **New Agenda for Coalition** which promotes the NPT and pushes for nuclear disarmament worldwide. Hence, New Zealand has failed to give an outright statement of support for India’s bid to become a member of the Nuclear Suppliers Group.

What is New Agenda for Coalition?

The New Agenda Coalition (NAC) is a geographically dispersed group of middle power countries seeking to build an international consensus to make progress on nuclear disarmament, as legally called for in the nuclear NPT. It was formed in 1998.

Composition:

It is composed of Brazil, Egypt, Ireland, Mexico, New Zealand and South Africa. All current members of the New Agenda Coalition have joined the Humanitarian Initiative, which was founded in 2013 also in the context of the NPT.

Its significance:

The group was formed in response to the North-South divide that stymied talks on nuclear disarmament and non-proliferation within the framework of the NPT. Non-nuclear weapon states believed that not enough progress was being made on disarmament to have warranted the Indefinite Extension of the treaty in 1995, and that the nuclear weapons states were not fulfilling their legal responsibilities towards disarmament, as outlined by Article VI of the NPT.

**Disarmament and Security Committee**

-UNGA’s disarmament and security committee voted for negotiations to begin next year on a new international treaty to prohibit nuclear weapons.

4 of the 5 UNSC nuclear powers - Britain, France, Russia and the United States — voted against the draft resolution while China abstained besides India and Pakistan

-**Why is it important?**

• It moves diplomatic and legal action beyond the veto power of nuclear-dependent governments that want to keep their privileges under the Non-Proliferation Treaty.

• The new multilateral treaty will for the first time provide a comprehensive approach to prohibiting activities such as the use, deployment, production, transporting, stockpiling and financing of nuclear weapons.

• It will also extend the NPT's nuclear disarmament obligation by creating a clear, unequivocal legal obligation to eliminate existing arsenals that will apply to non-NPT as well as all NPT states.

-**About NPT**

• Non-Proliferation Treaty or NPT, is an international treaty whose objective is to –

* prevent the spread of nuclear weapons and weapons technology,
* promote cooperation in the peaceful uses of nuclear energy, and
* to further the goal of achieving nuclear disarmament and general and complete disarmament.

• It came into being in 1970. In 1995 it was extended indefinitely.

• The treaty recognises five permanent UNSC members: the US, Russia, the UK, France and China.

• Four UN member states have never joined NPT: India, Israel, Pakistan and South Sudan

**Distributors caution on haste in LPG rollout**

LPG distributors have raised serious concerns regarding the government’s haste in implementing the targets set under the Pradhan Mantri Ujjwala Yojana (PMUY) which is aimed at providing poor households with LPG connections, saying that rushed implementation could compromise the safety of the recipients.

Background:

The Ministry of Petroleum and Natural Gas had recently issued a statement highlighting the steps it had been taking to ensure the safety of the LPG cylinder recipients, saying that it has been providing safety handouts, safety briefings at the time of installation and has been organising safety melas and clinics to increase awareness.

Following this, oil marketing companies had sent letters to distributors exhorting them to meet the PMUY target of 3,000 registrations by September 30, 2016 “without fail” or face the consequences, pressure that the distributors say only adds to the safety hazard.

About the Pradhan Mantri Ujjwala Yojana:

Under the Pradhan Mantri Ujjwala Yojana, Rs.8,000 crore has been earmarked for providing 50 million LPG (liquefied petroleum gas) connections to poor households.

* Each beneficiary will get financial support of Rs.1,600 for securing an LPG connection.
* Eligible households will be identified in consultation with state governments and Union territories.
* The scheme will be implemented over the next three years.
* The scheme is being implemented by the Ministry of Petroleum and Natural Gas.

*Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.*

**Revised double-tax pact with Korea notified**

 -India has notified the revised double tax avoidance agreement with South Korea under which capital gains tax will be levied at the source with effect from April 1, 2017.

- The revised DTAA provides for source-based taxation of capital gains;

Background:

The existing Double Taxation Avoidance Convention, which has been in vogue for three decades, provides for residence-based taxation of capital gains on shares, which means taxes were to be paid where the investor was a resident.

*Paper 3 Topic: Major crops cropping patterns in various parts of the country, different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.*

**Biotech- KISAN and Cattle Genomics: e-tech in the aid of farmers**

-Min of S&T has launched 2 farmer centric pgrms – Biotech-KISAN and Cattle Genomics;

Biotech-KISAN

-launched by Department of Biotechnology(under Min of S&T);

* The Scheme is for farmers, developed by and with farmers, it empowers women, impacts locally, connects globally, is Pan-India, has a hub-and spoke model and stimulates entrepreneurship and innovation in farmers.
* **For farmers**- Biotech-KISAN aims to link farmers, scientists and science institutions across the country in a network that identifies and helps solve their problems in a cooperative manner.
* **For Women**-
  + Mahila Biotech- KISAN fellowships for training and education in farm practices women farmers.
  + The Scheme also aims to support the women farmers/ entrepreneur in their small enterprises, making her a grass root innovator.
* **Connect Globally -** Biotech-KISAN will connect farmers to best global practices; training workshops will be held in India and other countries. Farmers and Scientists will partner across the globe.
* The scheme is targeted towards the least educated marginalised farmer; Scientists will spend time on farms and link communication tools to soil, water seed and market. The aim is to understand individual problems of the smallholding farmers and provide ready solutions.
* **Hub and Spoke model -** Biotech KISAN will connect farmers with science in the 15 agro-climatic zones of the country in a manner, which constantly links problems with available solutions. In each of these 15 regions, a Farmer organisation will be the hub connected to different science labs, Krishi Vigyan Kendra and State Agriculture Universities co-located in the region. The hub will reach out to the farmers in the region and connect them to scientists and institutions.
* The hub will have tinkering lab, communication cell and will run year-long training, awareness, workshops and which will act as education demonstration units to encourage grass root innovation in the young as well as women farmers.
* There will be a communication set-up to make radio and TV programmes for local stations, as well as daily connectivity through social media.

- **Cattle Genomics**

• Through this programme, the government aims to improve the genetic health of the cattle population through genomic selection.

• Genome sequencing of indigenous cattle breeds from all registered cattle breeds of India by involving various stakeholders is to start soon.

• Genomic selection will ensure high-yielding, disease-resistant, resilient livestock.

• The programme also envisages development of high-density DNA chips. This will reduce the cost and time interval for future breeding programmes and productivity of indigenous cattle would be enhanced.

**Insights Daily Current Affairs, 28 October 2016**

**Workshop On “Forest Rights Act, 2006 held**

A Workshop on “Forest Rights Act, 2006 – its Implementation, benefits to tribal and other traditional forest dwelling communities and its challenges” was recently held in New Delhi as part of National Tribal Carnival – 2016.

* The Workshop was attended by approximately 250 delegates including Ministers from the States Members of Parliament, Members of State Legislatures and other dignitaries.

About Forest Rights Act (FRA):

The legislation, which was passed in December 2006, concerns the rights of forest-dwelling communities to land and other resources, denied to them over decades as a result of the continuance of colonial forest laws in India.

* The Act grants legal recognition to the rights of traditional forest dwelling communities, partially correcting the injustice caused by the forest laws.

Rights under the Act:

* Title rights – i.e. ownership to land that is being farmed by tribals or forest dwellers subject to a maximum of 4 hectares; ownership is only for land that is actually being cultivated by the concerned family, meaning that no new lands are granted.
* Use rights –
  + to minor forest produce (also including ownership),
  + to grazing areas,
  + to pastoralist routes, etc.
* Relief and development rights –
  + to rehabilitation in case of illegal eviction or forced displacement;
  + to basic amenities, subject to restrictions for forest protection.
* Forest management rights – to protect forests and wildlife.

Eligibility:

* Eligibility to get rights under the Act is confined to those who “primarily reside in forests” and who depend on forests and forest land for a livelihood.
* Further, either the claimant must be a member of the Scheduled Tribes scheduled in that area or must have been residing in the forest for 75 years.

Process of recognition of rights:

* The Act provides that the gram sabha, or village assembly, will initially pass a resolution recommending whose rights to which resources should be recognised.
* This resolution is then screened and approved at the level of the sub-division (or taluka) and subsequently at the district level.
* The screening committees consist of three government officials (Forest, Revenue and Tribal Welfare departments) and three elected members of the local body at that level. These committees also hear appeals.

*Paper 2 Topic: Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.*

**EPFO joins network of Common Services Centers**

To expand the reach of convenience offered to EPF members, Employees Provident Fund Organisation (EPFO) has joined the network of Common Services Centers (CSC). In this regard, a Memorandum of Understanding (MoU) has been signed between EPFO and CSC e-Governance Services India Limited (CSC SPV). The MoU is initially for a period of five years.

How it works?

To start with, the pensioners of Employees Pension Scheme of EPFO can submit their digital life certificates via Jeevan Pramaan Patra programme through a large number of points of Presence (PoP) of CSC networking in addition to those available at EPFO offices.

How it helps?

With this, the pensioners living in remote areas can avoid cost and inconvenience of travelling down to the EPF offices or their banks for filing paper based life certificate.

What are CSCs?

* Common Services Centers (CSC) network is one of the largest government approved online service delivery channel in the world.
* CSC are broadband enabled rural service delivery points;
* Are established by District e Governance Societies (DeGSs), selected by the State Governments, for aggregating content and offering relevant Government to Customers (G2C), Business to Customers (B2C), Business to Business (B2B) and other services.

CSCs enable the three vision areas of the Digital India programme:

* Digital infrastructure as a core utility to every citizen.
* Governance and services on demand.
* Digital empowerment of citizens.

**Cabinet approves establishment of National Academic Depository**

• HRD minister inaugurated the National Academic Depository (NAD) , a digital depository of academic awards

• It aims to replicate digitization and dematerialization of financial security depositories for the educational awards,

• The awards will be verified, authenticated, accessed and retrieved in a digital depository

• It is a move to enhance transparency and authenticity

• NAD will develop an online portfolio of all education certificates across Academic Institutes, which can be submitted easily for employment, higher education, and loans

• NAD will also integrate directly with Boards / Universities which issue Certificates and hence, will ensure authenticity of certificate records

•The NAD would be operationalised by NSDL Database Management Limited (NDML) and CDSL Ventures, Limited (CVL) – two of the wholly owned subsidiaries of the Depositories registered under Securities Exchange Board of India (SEBI) Act, 1992.

Background:

The Finance Minister’s Budget Speech of 2016-17, in February this year, incorporated this commitment to establish a Digital Depository for school learning certificates, degrees and other academic awards of Higher Education Institutions, on the pattern of a Securities Depository.

**Cabinet approves Agreement between India and Estonia on the transfer of sentenced persons**

The Union Cabinet has given its approval for signing and ratification of an Agreement between India and Estonia on the transfer of sentenced persons.

* Signing the Agreement facilitates the Indian prisoners imprisoned in Estonia or vice-versa to be near to their families, for serving remaining part of their sentence and shall facilitate their social rehabilitation.
* The transfer of such prisoners to their own native countries shall also facilitate their social rehabilitation.

Background:

Prior to 2004, there was no domestic Legislation under which foreign prisoners could be transferred to the country of their origin to serve the remaining part of their sentence, nor was there a provision for the transfer of prisoners of Indian origin convicted by a foreign court to serve their sentence in India.

* Hence, the Repatriation of Prisoners Act, 2003 was enacted. For achieving the objectives of the Act, a Treaty/Agreement is required to be signed with countries having mutual interest with India and later to the notified in the Official Gazette.
* The Government of India has so far signed bilateral Agreements on Transfer of Sentenced Persons with countries including United Kingdom, Mauritius, Bulgaria, France, Egypt, Sri Lanka, Cambodia, South Korea, Saudi Arabia and Bangladesh. So far total 65 prisoners have been exchanged, out of which 55 were Indians.

*Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.*

**CBDT signs 5 Unilateral APAs**

The Central Board of Direct Taxes (CBDT), Department of Revenue, Ministry of Finance has entered into five (5) Unilateral Advance Pricing Agreements (APAs) with Indian taxpayers.

Background:

The APA Scheme was introduced in the Income-tax Act in 2012 and the Rollback provisions were introduced in 2014.

The Scheme endeavours to provide certainty to taxpayers in the domain of transfer pricing by specifying the methods of pricing and determining the arm’s length price of international transactions in advance for a maximum period of five future years.

Further, the taxpayer has the option to roll-back the APA for four preceding years.

Since its inception, the APA scheme has attracted tremendous interest among Multinational Enterprises (MNEs) and more than 700 applications (both unilateral and bilateral) have been filed in just four years.

**Russia to destroy all of its chemical weapons by end of 2017**

Russia has indicated that it will destroy all of its chemical weapons by the end of next year – a year earlier than previously announced.

Background:

Russia had to build several plants in the past two decades to dispose of the world’s largest chemical weapons arsenal. As a signatory of the international Chemical Weapons Convention, Russia already has destroyed about 93% of its chemical weapons.

In 1993, when Russia signed the CWC, the country declared that it possessed 40,000 tons of toxic chemicals.

About the international Chemical Weapons Convention:

The Chemical Weapons Convention (CWC) is a multilateral treaty that bans chemical weapons and requires their destruction within a specified period of time.

* CWC negotiations started in 1980 in the UN Conference on Disarmament. The convention opened for signature on January 13, 1993, and entered into force on April 29, 1997.
* The CWC is implemented by the Organization for the Prohibition of Chemical Weapons (OPCW), which is headquartered in The Hague.
* The OPCW receives states-parties’ declarations detailing chemical weapons-related activities or materials and relevant industrial activities. After receiving declarations, the OPCW inspects and monitors states-parties’ facilities and activities that are relevant to the convention, to ensure compliance.
* The CWC is open to all nations and currently has 192 states-parties.
  + Israel has signed but has yet to ratify the convention.
  + A key non-signatory includes North Korea.

The Chemical Weapons Convention prohibits:

* Developing, producing, acquiring, stockpiling, or retaining chemical weapons.
* The direct or indirect transfer of chemical weapons.
* Chemical weapons use or military preparation for use.
* Assisting, encouraging, or inducing other states to engage in CWC-prohibited activity.
* The use of riot control agents “as a method of warfare.”

**Insights Daily Current Affairs, 29 October 2016**

**Inter-State Council reconstituted with PM as head**

The Inter-State Council, a constitutional body to facilitate coordination between states and the centre, has been reconstituted with Prime Minister Narendra Modi as the head.

Composition:

* Chair = PM;
* Chief ministers of all states and Union Territories
* 6 Union Ministers of Cabinet Rank nominated by PM- include MHA, MoD, MEA;
* Few Ministers have been appointed as permanent invitees.
* Administrators of Union Territories which do not have legislative Assembly will also be on the Council.

What is the inter-state council?

The Council is a recommendatory body to investigate and discuss subjects, in which some or all of the states or the union government have a common interest.

Key facts:

* Article 263 of the Constitution of India provides for the establishment of an Inter-State Council.
* It considers recommendations for the better coordination of policy and action, and also matters of general interest to the states.
* The inter-state council is not a permanent constitutional body for coordination between the states and union government. It can be established ‘at any time’ if it appears to the President that the public interests would be served by the establishment of such a council.

What is the composition of the inter-state council?

The inter-state council was established under Article 263 of the Constitution of India through a Presidential Order dated 28 May 1990. The Council shall consist of prime minister who is the chairman, chief ministers of all states who are members, chief ministers of union territories and administrators of UTs as members, and six union ministers of cabinet rank in the union council of ministers nominated by the prime minister are also members.

*Paper 2 Topic: Important International institutions, agencies and fora, their structure, mandate.*

**Range of BrahMos to be doubled**

India and Russia have agreed to double the range of the BrahMos supersonic cruise missile that the two produce together. This follows India’s recent accession to the Missile Technology Control Regime (MTCR).

Background:

Earlier, India was denied access to the missile technology with range over 300 km as it was not a member state.

Significance of this move:

Extending the range will significantly enhance the stand-off capability and the operational radius in striking targets. Combined with its speed and accuracy it will be a major force multiplier.

Brahmos:

* It is a two stage missile, jointly developed by India and Russia.
* The missile can fly at a supersonic speed of 2.8 Mach and at a height of ten metres during the final stages of its flight.
* It carries conventional warheads.
* It can be launched from ships, land and submarines. -🡪 no AIR

About MTCR:

* The Missile Technology Control Regime is an informal understanding between member countries to limit the proliferation of missiles, rocket systems, unmanned air vehicles and related technology for systems that –
  + can carry a 500 kilogramme payload for at least 300 kilometres, as well as
  + those systems intended for the delivery of weapons of mass destruction (WMD).
* It was established in April 1987 by the G-7 countries (Canada, France, Germany, Italy, Japan, the UK, and the United States).
* It is not an official treaty with legally binding obligations. It is only an informal political understanding.
* The items included under MTCR guidelines are divided into –
  + Category I (complete rocket and UAV systems)
  + Category II (dual use missile related components and systems).
* India became the 35th country to join the regime.

*Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India’s interests.*

**Arrest of staffer violates Vienna Convention, says Pakistan**

Pakistan has accused India of violating the international convention for protection of diplomats after New Delhi briefly detained a staffer of the Pakistan High Commission.

Background:

Indian security agencies recently arrested a Pakistani High Commission staffer on allegations of espionage. The charges are that he was found to be in possession of defence-related documents. Soon after the arrest, however, he was released, declared persona non grata, and informed that he must leave India within 48 hours.

What is the Vienna Convention?

It’s a treaty that came into force in 1964, which lays out the rules and regulations for diplomatic relations between countries as well as the various privileges that diplomats and diplomatic missions enjoy.

One of these privileges is legal immunity for diplomats so that they don’t have to face prosecution as per their host country’s laws.

**Facts for Prelims**

* The State of Himachal Pradesh has been declared Open Defecation Free (ODF). HP is the second State in the country (after Sikkim) to achieve the feat. With this, Himachal Pradesh has successfully achieved a total rural sanitation coverage of 100% in the State, with all 12 out of 12 districts in the State being both, declared as well as verified, as ODF.

**Ross Sea: WORLD'S LARGEST MARINE PARK**

-Twenty-four nations and the European Union have agreed unanimously to declare the Ross Sea in Antarctica an official Marine Protected Area after negotiations brokered by the UN’s Commission for the Conservation of Antarctic Marine Living Resources.

- Key facts

• It will be world’s largest marine park covering more than 1.5m sq km of the Ross Sea around Antarctica.

• It will be set aside as a no-take “general protection zone”, where no fishing will be allowed.

• The protections are set to expire in 35 years.

• The agreement was signed at meeting of Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).

• The agreement was facing opposition from China and Russia, which have fishing industries in the region.

• It is the first marine park created in international waters.

-Significance

• It will set a precedent for further moves to help the world achieve the IUCN’s recommendation that 30% of the world’s oceans be protected.

• This is important not just for the incredible diversity of life that it will protect, but also for the contribution it makes to building the resilience of the world’s ocean in the face of climate change.

- About Ross Sea:

• It is sometimes called the "Last Ocean" because it is largely untouched by humans and hence the least altered marine ecosystem on Earth

• Its nutrient-rich waters are the most productive in the Antarctic, leading to huge plankton and krill blooms that support vast numbers of fish, seals, penguins, and whales.

• Home to high concentrations of wildlife and an incredible array of animals, many found nowhere else on the planet.

• Ross Sea is a living laboratory providing scientists with the last chance to understand how a healthy marine ecosystem functions

**Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR):**

• It was established by international convention in 1982 with the objective of conserving Antarctic marine life.

• It has 25 Members, and a further 11 countries have acceded to the Convention.

• India is also a member of this commission.

• It is headquartered in Tasmania, Australia.

**Insights Daily Current Affairs, 31 October 2016**

**Three astronauts return from ISS**

Three astronauts recently landed safely in Kazakhstan following a 115-day mission aboard the International Space Station.

Key facts:

* The team included U.S. astronaut **Kate Rubins**, the **first person to sequence DNA in space**. Ms. Rubins’ participation in the mission generated particular excitement after NASA announced plans for the career scientist to sequence DNA aboard the ISS in a world first.
* Rubin’s participation was aimed at identifying potentially dangerous microbes aboard the ISS and diagnose illnesses in space.
* This journey marks the **first complete mission to and from the orbital lab for a new generation of Soyuz spacecraft** with upgraded features.

About the International Space Station (ISS):

The International Space Station (ISS) is a space station, or a habitable artificial satellite, in low Earth orbit. The ISS is now the largest artificial body in orbit.

* The ISS consists of pressurised modules, external trusses, solar arrays and other components. ISS components have been launched by Russian Proton and Soyuz rockets as well as American Space Shuttles.
* 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.
* The ISS maintains an orbit with an altitude of between 330 and 435 km by means of reboost manoeuvres using the engines of the Zvezda module or visiting spacecraft. It completes 15.54 orbits per day.
* ISS is the ninth space station to be inhabited by crews, following the Soviet and later Russian Salyut, Almaz, and Mir stations as well as Skylab from the US.
* The ISS programme is a joint project among five participating space agencies: NASA, Roscosmos, JAXA, ESA, and CSA.
* The ownership and use of the space station is established by intergovernmental treaties and agreements.
* The station is divided into two sections which is shared by many nations -
  + Russian Orbital Segment (ROS)
  + United States Orbital Segment (USOS).

**Andaman gets training in seaweed farming**

-Seaweed culture in India

• In India the Gulf of Mannar, Gulf of Kutch, Calh Bay, Hanshadweep and Bay islands are the important areas for seaweed culture.

• Research programmes on seaweed resources and their culture were taken up by the Central Marine Fisheries Research Institute and Central Salt and Marine Chemicals Research Institute.

-Central Marine Fisheries Research Institute (CMFRI) has transferred seaweed cultivation technology to the Andaman administration.

-About seaweed

• It gained prominence during 13th century, after the discovery of agar-agar in Japan and Alginic Acid in European continent.

• It is considered as the medicinal food of the 21st century. Many seaweeds are rich in vitamins and minerals and are eaten in various parts of the world.

• Main producers – China (50%), Indonesia (27%);

• Most of that seaweed ends up in our food, though there is a growing market in seaweed-based cosmetics and drugs.

-**Benefits**

• It is widely perceived as one of the most environmentally benign types of aquaculture activity(**Mari-culture)**, as it does not require additional feed or fertilisers.

• Seaweed cultivation also filters undesired nutrients and improves the marine environment and reduce eutrophication.

• Indirectly, seaweed farming has reduced over-fishing in many regions, providing coastal communities with an alternative livelihood.

• It has been actively promoted by government in many developing countries where communities have reduced access to alternative livelihoods or are involved in destructive fishing methods like dynamite fishing. In some places, women have become economically active for the first time.

• Seaweed is also used in landscaping or to combat beach erosion.

**Employees Online (EO) Mobile App of DoPT launched**

The government has launched the Employees Online (EO) App. EO App is a mobile application of the Department of Personnel & Training (DoPT), Ministry of Personnel, Public Grievances and Pensions.

Key facts:

* The application would enable its users, which may include officers, media persons and all stakeholders to stay updated on real time basis with appointments and postings approved by the Appointments Committee of the Cabinet (ACC) and vacancies at senior level in the Government of India.
* By eliminating the information asymmetry in this regard, the EO App will reduce speculations regarding transfers and postings in the Government of India and will make the system completely transparent as all the relevant orders and notifications will now be instantly available in the public domain.
* This is an effective management tool which also empowers the IAS officers on Pan India basis and officers serving under Central Staffing Scheme by providing their personal records like Annual Performance Appraisal Report (APAR), Immovable Property Return (IPR), Executive Record (ER) sheet through secured NIC login Id and Password.

Sources: the hindu.

*Paper 2 Topic: important international organizations.*

**Russia ousted from UN Human Rights Council in historic vote**

Russia has lost its bid to retain a seat on the UN Human Rights Council. The General Assembly recently elected 14 countries to the 47-member council. With 112 votes, Russia lost to Hungry and Croatia.

* This is the first time Russia has not been part of the UNHRC since the council’s inception in 2006.
* 80 different human rights organizations had signed a petition asking Russia be removed from UNHRC after Russia’s involvement in Syria’s civil war caused many to believe Russia is guilty of war crimes.
* Russia’s ousting from the UNHRC is inconsistent with Saudi Arabia’s successful reelection to the council. Despite harsh criticism regarding Saudi Arabia's actions in the Yemeni civil war, the country kept its place on the Human Rights Council. It underscores the use of human rights as a tool of Western intervention

UNHRC:

It is an inter-governmental body within the United Nations system responsible for strengthening the promotion and protection of human rights around the globe and for addressing situations of human rights violations and make recommendations on them.

* Set up in 2006;
* It meets at the UN Office at Geneva.
* The Council is made up of 47 United Nations Member States which are elected by the UN General Assembly.
* The term of each seat is three years, and no member may occupy a seat for more than two consecutive terms.= **no 3 successive terms**;
* The council works closely with the Office of the High Commissioner for Human Rights and engages the United Nations’ special procedures.
* The General Assembly can suspend the rights and privileges of any Council member that it decides has persistently committed gross and systematic violations of human rights during its term of membership. The suspension process requires a two-thirds majority vote by the General Assembly.
* They make decisions ranging from exposing violations to recommending that the Security Council make a referral to the International Criminal Court;
* The council doesn’t have the authority to take action but can exert significant pressure on the violating country and set up special rapporteurs with the mandate to investigate and report human-rights abuses.