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GS PAPER - I

Paper 1 Topic: *Salient features of Indian Society, Diversity of India.*

Karnataka anti-superstition Bill

The Karnataka Cabinet has cleared the much-delayed and debated **Karnataka Prevention and Eradication of Inhuman Evil Practices and Black Magic Bill, 2017**, popularly known as **the anti-superstition Bill**.

- The Bill, if cleared by the State legislature, is expected to put an end to various inhuman practices such as black magic, witchcraft, or any act in the name of religion that causes harm to humans and animals. However, acts such as Kesh Lochan (plucking of hair), vastu and astrology have not been barred.

The bill bans the following:

- Performing any inhumane act, evil practices and black magic in search of treasure, bounty.
- Tantric acts including physical and sexual assault.
- Parading anyone naked.
- Ostracising anyone in the name of ritual and encouraging inhumane acts.
- Creating impression of 'possession' and exorcism.
- Assaulting people under the garb of exorcism.
- Spreading misinformation and creating panic in the garb of ghosts, black magic.
- Making claims of healing power.
- Propagating practices that involve self-mutilation.
- Coercing people to perform fire-walking.

What is not banned:

- The form of the worship such as Pradakshina, Yatra, Parikrama performed at religious places.
- Harikata, Keerthana, Pravachana, Bhajana, teaching of ancient and traditional learning and arts, practice, propagation and circulation.
- Miracles of the deceased saints propagation, publicity and circulation of the same and the propagation, publicity and distribution of literature about miracles of the religious preachers which do not cause physical injury.
- Performance of prayers, upasana and religious rituals at home, temple, darghas, gurdwara, pagoda, church, and other religious places which do not cause physical injury.
- All religious celebrations, festivals, prayers, procession and other act relating other rituals.
- Piercing of ears and nose of children in accordance with rituals and performance of religious ritual such as Kesh Lochan by the Jains.
- Advice in regard to vastu shashtra, and advice by jyothishya and other astrologers.

Sources: the hindu.

Paper 1 Topic: *Role of women and women's organization, population and associated issues, poverty and developmental issues, urbanization, their problems and their remedies.*

Sitharaman becomes India's first full-time woman defence minister

Nirmala Sitharaman has become **the first woman to become a full-time defence minister of the country**. Sitharaman will now be a member of the crucial Cabinet Committee on Security.

Facts for Prelims:

1st full time and overall 2nd woman to become defence minister: Sitharaman is the second woman to take charge of the crucial ministry as Indira Gandhi, as the prime minister, had also held the portfolio in the '70s.

Members of the Cabinet Committee on Security include the prime minister, home minister, external affairs minister and the finance minister.

Sources: the hindu.

Ahmedabad gets status of India's first World Heritage City by UNESCO

The commercial capital of Gujarat, Ahmedabad, has been formally accorded the status of **India's first World Heritage City by UNESCO**. In July, the UN agency had inscribed Ahmedabad as India's first World Heritage City at a meeting held in Poland.

Facts for Prelims:

- The honour makes the walled city of Ahmedabad the **first city in India, and the third in Asia**, to be on the list. **The other two cities are- Bhaktpur in Nepal and Galle in Sri Lanka.**
- **India is second after China in terms of number of world heritage properties in ASPAC** (Asia and Pacific) region, and overall seventh in the world.
- **India now has a total of 36 World Heritage Inscriptions** — 28 cultural, 7 natural and 1 mixed site.

Background:

Founded in the 15th century by Sultan Ahmad Shah, the walled city of Ahmedabad, on the eastern bank of the Sabarmati river, presents a rich architectural heritage. It has 28 Archaeological Survey of India's centrally protected monuments.

World Heritage Cities:

The World Heritage Cities Programme is one of six thematic programmes formally approved and **monitored by the World Heritage Committee**. It **aims to assist States Parties in the challenges of protecting and managing their urban heritage**. The programme is structured along a two-way process, with 1) the development of a theoretical framework for urban heritage conservation, and 2) the provision of technical assistance to States Parties for the implementation of new approaches and schemes.

Sources: the hindu.

Two new contraceptives launched by Health Ministry to aid family planning

In a bid to keep a check on the increasing population in the country, The Ministry of Health and Family Welfare has launched two new contraceptives- MPA and Chhaya.

Key facts:

- The two new contraceptives, **an injectable contraceptive MPA under the 'Antara' programme and a contraceptive pill, 'Chhaya'**, in the public health system will expand the basket of contraceptive choices to meet the emerging needs of couples.
- The contraceptives are being launched under **the government's Mission Parivar Vikas, a central family planning initiative.**
- The contraceptives are safe and highly effective, the 'Antara' injectable being effective for three months and the 'Chhaya' pill for one week, and will help meet the changing needs of couples and help women plan and space their pregnancies.

About Mission Parivar Vikas:

The main objective of the Mission Parivar Vikas family planning initiative is **to bring down the Total Fertility Rate (TFR) to 2.1**, which is when the population starts stabilizing, by the year 2025.

- The mission is being implemented in 146 high focus districts that house 44% of the country's population, with the highest total fertility rates of 3 and more in the country. The high focus districts are in the seven states of Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, Jharkhand, Chhattisgarh and Assam.
- The key strategic **focus of this initiative will be on improving access to contraceptives** through delivering assured services, dovetailing with new promotional schemes, ensuring commodity security, building capacity (service providers), creating an enabling environment along with close monitoring and implementation.

Army to induct women into military police soon to probe gender crimes

The government has decided to recruit women jawans into the Army's Corps of Military Police (CMP) for investigating gender specific crimes. The proposal is very significant as women will be inducted in **the military's non-officer cadre for the first time**, although they will be in a non-combat role.

Key facts:

- Women were required in the Corps of Military Police (CMP) to investigate gender-specific allegations and crime.
- The women will be inducted as junior commissioned officers and jawans.



Background:

The armed forces account for around 3,500 women officers, all of whom are in non-combat roles. Women were allowed to join the military as officers outside the medical stream for the first time in 1992. In the navy, women are still not permitted to serve in submarines and warships, while the army bars them from front-line ground combat positions and tank units.

Way ahead:

Though this is good move, induction of women into the Army's combat arms could still be a long way as the CMP is only a support arm. For women to progress on to roles of higher responsibility and hence equality, there need to be operational changes in the way the Army looks at its lady officers and at the same time bring out a mentality change.

Very few countries have allowed women in combat roles. The exceptions include Germany, Australia, Canada, the US, Britain, Denmark, Finland, France, Norway, Sweden and Israel.

About CMP:

Corps of Military Police (CMP) is **the military police of the Indian Army**. In addition, the CMP is trained to handle prisoners of war and to regulate traffic, as well as to handle basic telecommunication equipment such as telephone exchanges. They can be identified by their red berets, white lanyards and belts, and they also wear a black brassard with the letters MP imprinted in red.

The term 'red berets' is synonymous with the personnel of the elite corps of Military Police (CMP), since all ranks of this Corps adorn the exclusive red berets along with white belts to distinguish themselves from other Corps of Army.

Functions: The role of this Corps is primarily to assist Army formations in maintaining a high standard of discipline of its troops, prevent breaches of various rules and regulations and to assist in the preservation of high morale of all ranks of the formation.

Sources: the hindu.

Navika Sagar Parikrama

Defence Minister, Nirmala Sitharaman recently flagged-off all-women crew of **Navika Sagar Parikrama** at the INS Mandovi naval training base near Panaji. The crew of the 'Sagar Parikrama' comprises of six-member all women team on board the sailing vessel INSV Tarini and will circumnavigate the globe in approximately 165 days.

Key facts:

- This is **the first ever Indian circumnavigation of the globe by an all-women crew**. The project is considered essential towards promoting Ocean Sailing activities in the Navy while depicting Government of India's thrust for 'Nari Shakti'.
- The expedition has been aptly titled 'Navika Sagar Parikrama', aimed at promoting women empowerment in the country and ocean sailing by the Indian Navy.



- Navika Sagar Parikrama would cover the expedition in five legs with stop-overs at four ports (Fremantle, Australia; Lyttleton, New Zealand; Port Stanley, the Falklands; and Cape town, South Africa) for replenishment of ration and repairs as necessary, before returning to Goa in April 2018.

Aims of the Expedition are as follows:

- **Nari Shakti:** In consonance with the National policy to empower women to attain their full potential, the expedition aims to showcase 'Nari Shakti' on the world platform. This would also help to discard the societal attitudes and mindset towards women in India by raising visibility of participation by women in challenging environment.
- **Environment and Climate Change:** Sailing encourages the use of environment friendly non-conventional renewable energy resources which affects the life of women. The expedition thereby aims at harnessing the energy to optimise the livelihood of the women onboard.
- **Make in India:** The voyage also aims to show case the 'Make in India' initiative by sailing onboard the indigenously built INSV Tarini.
- **Meteorological/ Ocean/ Wave Data Observation:** The crew would also collate and update Meteorological/ Ocean/ Wave data on a daily basis for subsequent analysis by research and development organisations.
- **Marine Pollution:** The crew would monitor and report marine pollution on the high seas.

Sources: the hindu.

Bengaluru Named Among World's Top 25 High-Tech Cities

Bengaluru has emerged among **the top 25 high-tech cities of the world**, according to research firm 2thinknow that specializes in analyzing innovative cities. **Bengaluru stands at number 19, climbing rapidly from the 49th spot it was at last year.**

Background:

Research firm 2thinknow ranked 85 cities keeping 10 factors in mind: number of patents filed per capita, startups, tech venture capitalists, ranking in other innovation datasets, and level of smartphone use.

Performance of cities:

- Bengaluru's rise in ranks has been due to the influx of IT companies and the city's growing population of digital natives.
- San Francisco, the 'Silicon Valley', is at No. 1 spot. New York comes behind the Silicon Valley.
- Beijing and Shanghai rank higher than Bengaluru this year, occupying 16th and 17th spots, respectively.
- London, a city with more startups and programmers than any city in the world, is listed at No. 3. Los Angeles is at No. 4. Ranked number 5 is the city of future, Seoul.
- Taipei in Taiwan, Boston in Massachusetts, Singapore, Toronto and Chicago make the top 10.

Sources: et.

Swachhta Hi Seva

The Centre is all set to launch a nation-wide, fortnight-long sanitation campaign from September 15 to October 2 to highlight the government's flagship cleanliness initiative Swachh Bharat Mission. The campaign, **named 'Swachhta Hi Seva' (cleanliness is service)** will be launched by President Ram Nath Kovind from Ishworiganj village in Kanpur.

About the campaign:

- The campaign is being **coordinated by the Ministry of Drinking Water and Sanitation**, the convening Ministry for the Swachh Bharat Mission.
- The objective of the campaign is **to mobilise people and reinforce the "Jan Aandolan" for sanitation to contribute to Mahatma Gandhi's dream of a Clean India.**
- It will see large scale mobilisation of people from all walks of life to undertake shramdaan for cleanliness and construction of toilets and to make their environments free from open defecation. There will be targeted cleaning of public and tourist places.

- Ministry of Drinking Water and Sanitation has made elaborate plans along with the State Governments to involve people from various walks of life and make this an unprecedented people's campaign.
- Reaching out to the poor and marginalised and providing them with sustainable sanitation services would be the hallmark of this campaign.

Background:

Sanitation is linked to various sectors. From health to giving security and dignity to women, sanitation also affects a country economically. According to UNICEF (United Nations Children's Fund) good sanitation can save Rs50,000 per year per family.

Sources: pib.

Assam Assembly adopts resolution for Population Policy

Seeking to curb population explosion in the state, especially among religious minority, through women empowerment in order to check increasing demographic changes and pressure over limited resources, the Assam legislative assembly has passed a government resolution for adopting a **'Population and Women Empowerment Policy of Assam'**.

Highlights of the policy:

- The policy has a **strict two-child policy for government servants and elected/nominated representatives of panchayat, municipal and statutory bodies**, with stress on women empowerment and awareness.
- The Policy seeks **to empower women for making learned choice regarding motherhood** as it would lead to better living conditions for the communities.
- The policy has provisions **to bar people with more than two children from contesting election** for panchayat, municipal and other statutory bodies and committees at the state level.

Background:

Assam's average family size is 5.5 which is above the national average that has pushed the state's population by almost one crore to 3.12 cr between 2001 and 2011 census while the population density is 398 as per 2011 census as against 340 in 2001.

The population pressure has had a profound impact on the economy as Assam was among the lowest five States in terms of GDP growth (less than 6%) between 2005 and 2014. Also, the 37.9% of the population fall in the category of "poverty headcount ratio" of UNDP. At 61, the unemployment rate in the State is also high, compared to the national average of 50.

Sources: et.

Assam forms 'State Capital Region' around Guwahati

In line with the National Capital Region, Assam will have a **State Capital Region** encompassing Guwahati and its peripheral areas with the passing of a bill in the state Assembly. The Assembly recently passed **Assam State Capital Region Development Authority (ASCRDA) Bill 2017** to set up the regional authority for preparation of a plan for rapid development of the SCR.

Key facts:

- The SCR shall comprise the districts of Kamrup Metropolitan, Kamrup, Nalbari, Darrang and Morrigaon, fully or partly. Capital Guwahati is in Kamrup Metropolitan district.
- ASCRDA will be the overall authority to direct, implement and monitor the development of SCR.
- ASCRDA will be headed by the State Chief Minister. It will prepare a regional plan for the area and coordinate the preparation of functional plans, regional plans, development schemes and project plans by the authority itself as well as by the municipal corporations, local bodies, panchayats and different government departments.
- The body will be entrusted to organise and oversee the financing of selected development projects in the State Capital Region through government funding as well as other sources of revenue.

What necessitated this move?

The authority and guidelines of existing Guwahati Municipal Corporation Development Authority (GMDA), Guwahati Municipal Corporation (GMC) and other urban authorities were not sufficient for desired development and growth of SCR.

Sources: et.

Review of FSI/FAR norms in mega cities

The government has ordered **the review of Floor Space Index (FSI) and Floor Area Ratio (FAR) norms in mega cities** of the country. The time bound review of these norms will be taken up in all the 53 cities with a population of one million and above each. A similar review for State Capitals with less than million population will also be taken up each in due course. The review to be taken up in consultation with States and cities is to cover an assessment of the existing norms and to what extent it could be enhanced.

What is FSI?

FSI is the ratio of a building's total floor area to the size of the piece of the land on which it is built. In Indian cities, it is generally about 1.50, which is said to be on the lower side given the needs of rapid urbanization.

Need for review:

NITI Ayog in their report noted that a comparison of Mumbai and Shanghai illustrates the deleterious effects of restrictive FSI. In 1984, Shanghai had only 3.65 sq.mt of space per person. Through liberal use of FSI, despite increase in population since 1984, the city had increased the available space to 34 sq.mt per person. In contrast, in 2009, Mumbai on average had just 4.50 sq.mt of space per person.

Therefore, review is necessary to give a properly planned push to the urban development in the country. Besides, increasing the availability of land in urban areas is critical to meet the demand for affordable housing under Pradhan Mantri Awas Yojana (Urban).

Sources: pib.

Gorakhpur, Koraput and Thane to launch Zero Hunger Programme

Three districts – Gorakhpur in Uttar Pradesh, Koraput in Odisha and Thane in Maharashtra – will initiate **India's ambitious 'Zero Hunger' programme** through interventions in farm sector on October 16 (World Food Day).

Though many more districts will eventually be covered under this dedicated farm-based programme **in sync with India's Sustainable Development Goals (SDGs) to end hunger by 2030**, these three would act as a model of an integrated approach to deal with hunger and malnutrition by adopting suitable agricultural/horticultural practices.

Key facts:

- The Programme will be initiated by the the Indian Council of Agricultural Research (ICAR) in association with the Indian Council of Medical Research (ICMR), the M S Swaminathan Research Foundation and the Biotechnology Industry Research Assistance Council (BIRAC).
- The concerned state governments will also be involved in the programme which consists of organisations of farming system for nutrition, setting up genetic gardens for biofortified plants/crops and initiation of a 'Zero Hunger' training.
- The programme will ensure suitable methods of measuring the impact of intervention. There will be intensive training programme in order to identify the nutritional maladies in each district and the appropriate agricultural/horticultural and animal husbandry remedies.
- This programme will be launched in addition to what the government has planned to deal with the issue of malnutrition through various other initiatives under its goal to make India malnutrition free by 2022.

SDG: Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

What is a genetic garden?

A genetic garden for biofortified plants/crops contains the germplasm of naturally biofortified crops or such crops through plant breeding. It has plants and crops that help supplement micro-nutrient deficiencies, including iron, iodine, vitamin A and zinc among others.

Hunger:

- Globally, one in nine people in the world today (795 million) are undernourished
- **The vast majority of the world's hungry people live in developing countries**, where 12.9% of the population is undernourished.
- **Asia is the continent with the most hungry people** – two thirds of the total. The percentage in southern Asia has fallen in recent years but in western Asia it has increased slightly.
- **Southern Asia faces the greatest hunger** burden, with about 281 million undernourished people. In sub-Saharan Africa, projections for the 2014-2016 period indicate a rate of undernourishment of almost 23 per cent.
- Poor nutrition causes nearly half (45 per cent) of deaths in children under five – 3.1 million children each year.
- One in four of the world's children suffer stunted growth. In developing countries the proportion can rise to one in three.
- 66 million primary school-age children attend classes hungry across the developing world, with 23 million in Africa alone.

Sources: pib.

Women's Reservation Bill

The centre is planning to introduce **the Women's Reservation Bill** in the upcoming session of the parliament.

Inception:

The Women's Reservation Bill was first conceived more than 20 years back on September 12, 1996. This bill pushed for a 33% reservation of all Lok Sabha and state legislative assemblies for women.



The Rajya Sabha passed the bill on 9 March 2010. However, the Lok Sabha never voted on the bill. The bill lapsed after the dissolution of the 15th Lok Sabha in 2014.

Highlights of the Bill:

- **The Constitution (One Hundred and Eighth Amendment) Bill, 2008** seeks to reserve one-third of all seats for women in the Lok Sabha and the state legislative assemblies. The allocation of reserved seats shall be determined by such authority as prescribed by Parliament.
- **Total reservation:** One third of the total number of seats reserved for Scheduled Castes and Scheduled Tribes shall be reserved for women of those groups in the Lok Sabha and the legislative assemblies.
- **Rotation:** Reserved seats may be allotted by rotation to different constituencies in the state or union territory.
- Reservation of seats for women shall cease to exist 15 years after the commencement of this Amendment Act.

What proponents say?

There are divergent views on the reservation policy. Proponents stress the necessity of affirmative action to improve the condition of women. Some recent studies on panchayats have shown the positive effect of reservation on empowerment of women and on allocation of resources.

To have more women in legislatures and the government is a big step towards empowering women in society. The experience of several village panchayats that have women as effective leaders bears testimony to this fact. Affirmative action of this kind is the best way to usher in social and gender justice.

What opponents say?

Opponents argue that it would perpetuate the unequal status of women since they would not be perceived to be competing on merit. They also contend that this policy diverts attention from the larger issues of electoral reform such as criminalisation of politics and inner party democracy.

- Reservation of seats in Parliament restricts choice of voters to women candidates. Therefore, some experts have suggested alternate methods such as reservation in political parties and dual member constituencies.
- Besides, it is argued that rotation of reserved constituencies in every election may reduce the incentive for an MP to work for his constituency as he may be ineligible to seek re-election from that constituency.

Sources: the hindu.

Women rejoice as Saudi ban ends

In a historic decision, Saudi Arabia has decided to allow women to drive. Campaigners in Saudi Arabia have hailed King Salman's decree allowing women to drive for the first time.

Background:

The Gulf kingdom is the only country in the world that bans women from driving – and women are still subject to strict dress codes and gender segregation. Until now, only men were allowed licences and women who drove in public risked being arrested and fined.

What happens now?

- A ministerial body will be set up to give advice within 30 days.
- The royal order will be implemented by 24 June 2018.

What has the road to reform been like?

Rights groups in the kingdom have campaigned for years to allow women to drive, and some women have been imprisoned for defying the rule. Female activists organised collective protests in 1990, 2011 and 2013, and posted online videos of themselves driving.

In recent years, some members of the Saudi royal family have expressed support for ending the ban. Last year, the government launched the Vision 2030 plan to modernise the economy – which was seen as a sign the country was moving towards reform.

Other limits on Saudi women:

Saudi law enforces a strict form of Sunni Islam known as Wahhabism and is known for its gender segregation rules.

Women have to adhere to strict dress codes, must not associate with unrelated men, and if they want to travel, work or access healthcare they must be accompanied by – or receive written permission from – a male guardian.

Significance of this decision:

With more than half the country aged under 25, the latest move is seen as catering to the aspirations of younger people. The country further aims to loosen social restrictions, which has so far not translated into more political or civil rights and also seeks to ease criticism over recent arrests.

Sources: the hindu.

GS PAPER - II

Paper 2 Topic: *Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.*

Simultaneous LS, assembly polls good

Chief minister Nitish Kumar has come out in support of **holding simultaneous elections** to the Lok Sabha and state assemblies. He said, "Holding simultaneous elections is, in principle, a very good proposal. It will not only reduce the period of election atmosphere, but also provide maximum time to the elected governments for work."

Support from NITI Aayog:

The Niti Aayog has also favoured conducting synchronised two-phase Lok Sabha and assembly elections from 2024 in "national interest". All elections in India should happen in a free, fair and synchronised manner to ensure minimum "campaign mode" disruption to governance, the government think tank had said in its report released recently.

NITI Aayog has proposed the following in this regard:

- To implement this in the national interest, **a focused group of stakeholders comprising constitutional and subject matter experts, think tanks, government officials and representatives of various political parties** should be formed to work out appropriate implementation related details.
- **This may include drafting appropriate Constitution and statutory amendments**, agreeing on a workable framework to facilitate transition to simultaneous elections, developing a stakeholder communication plan and various operational details.
- It has made **the Election Commission the nodal agency** to look into the suggestion and set a "timeline" of March 2018 for this purpose.

Simultaneous elections: Is it a good idea?

- This will help save public money.
- It will be a big relief for political parties that are always in campaign mode.
- It will allow political parties to focus more on policy and governance.

Need for simultaneous elections:

Unnecessary expenditures: Elections are held all the time and continuous polls lead to a lot of expenditure. More than Rs1,100 crore was spent on the 2009 Lok Sabha polls and the expenditure had shot up to Rs4,000 crore in 2014.

Use of manpower: Also, over a crore government employees, including a large number of teachers, are involved in the electoral process. Thus, the continuous exercise causes maximum harm to the education sector.

Security concerns: Security forces also have to be diverted for the electoral work even as the country's enemy keeps plotting against the nation and terrorism remains a strong threat.

Way ahead:

The time is ripe for a constructive debate on electoral reforms and a return to the practice of the early decades after Independence when elections to the Lok Sabha and state assemblies were held simultaneously. It is for the Election Commission to take this exercise forward in consultation with political parties.

Sources: et.

States will have to compete for central projects

The Centre has decided to adopt the so-called **challenge method** for awarding all projects to states so as to bring in speed, efficiency and transparency, besides putting an end to allocation of big projects on political consideration.

What you need to know about the so-called challenge method?

Under this method, prospective states will be rated on more than half-dozen parameters prescribed in the guidelines issued and the project will go to the state with the highest score on a scale of zero to 100.

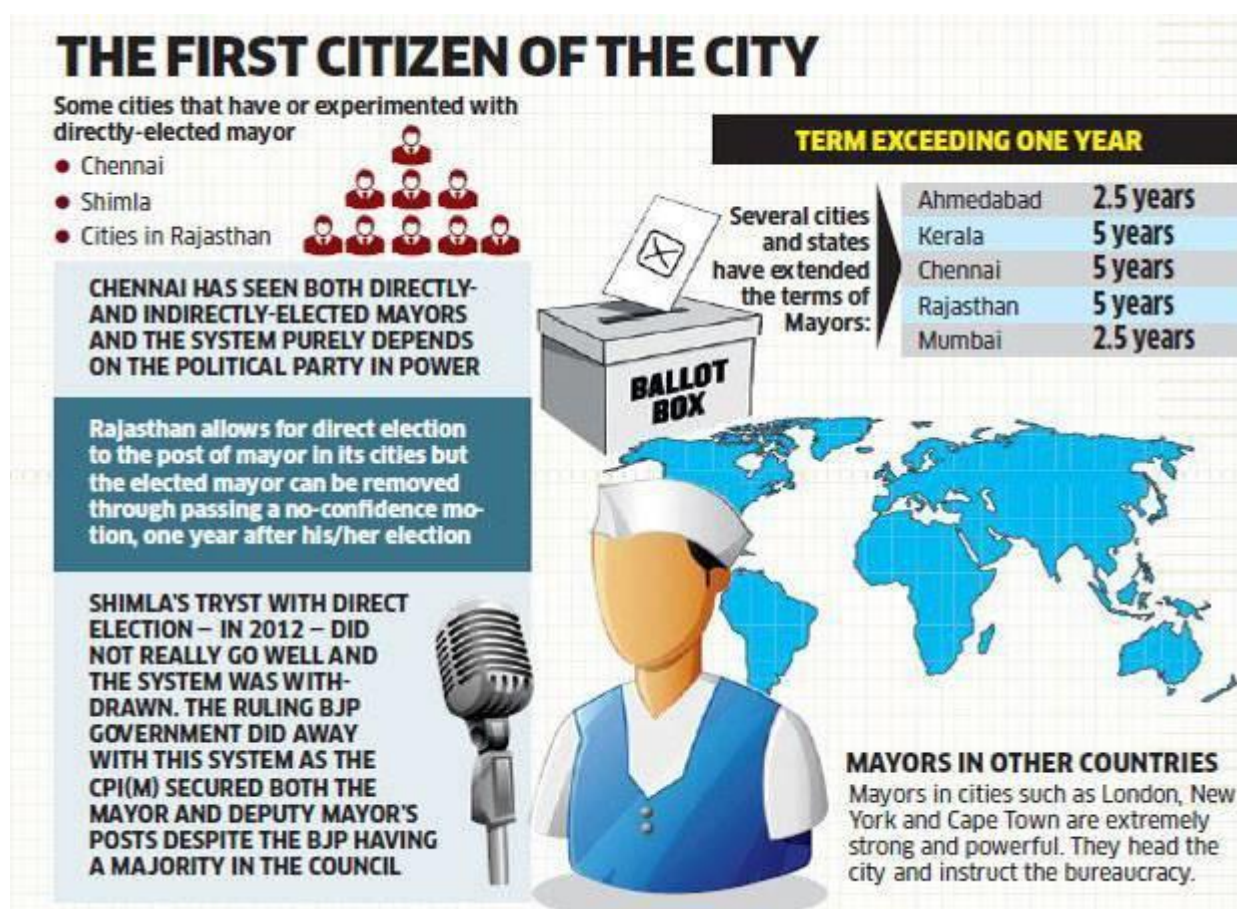
- The challenge method for selecting the state as well as the site for the projects, which can be both brownfield and greenfield projects, will now be applicable across sectors such as aviation, roads, railways, health, education, IT, power and textiles.
- It will also be used for awarding all national events such as national games and youth festivals to states.

Significance of this method:

- This is expected to spur competition among states and union territories both in terms of offering the best sites and committing resources in terms of land, utilities, infrastructure support and financial contribution, which in turn would encourage optimum utilisation of scarce resources and help in timely completion of projects.
- Awarding projects based on the challenge method will ensure due diligence is being done by all departments and states. This will also mean that gestation period for all these projects will come down significantly and there will be no major delays and this will give enough push to efficiency.

Sources: et.

Should Bengaluru get a directly-elected mayor with a five-year term and more powers?



Bengaluru got its 51st mayor recently. However, despite this 'worshipful' post of the first citizen of the city having been in existence for more than half a century, the role of the mayor of Bengaluru has largely remained a ceremonial one. **The Kasturirangan committee report on Bengaluru's urban governance released in 2008**, had termed the post as *"a one-year wonder intended only for ceremonial purpose."*

Time and again there has been talk about revisiting the mayor's role. The latest was in 2015, when the BBMP Restructuring Committee recommended a directly-elected mayor with a five-year term.

Need for directly elected mayors:

- While there are multiple reasons for India's urban woes, one of the underlying problems is the absence of powerful and politically accountable leadership in the city. Our cities have a weak and fragmented institutional architecture in which multiple agencies with different bosses pull the strings of city administration.

- Currently, the head of the municipal corporation, the mayor, is merely a ceremonial authority and executive decisions are carried out by the municipal commissioner appointed by the state government.
- An elected mayor with substantial powers of his own not only provides a single point for negotiations with outside agencies and investors but also ensures greater coordination among the different city departments and promotes decisive decision making.
- A popularly elected mayor with a fixed tenure also offers more stability in governance as the person is not dependent on the elected members of the council or on the local or state level political leadership for his survival in office. A stable leadership can also afford to roll out long term plans that will ensure major changes in the cities political and economic landscape.

The concept should face the following challenges before it becomes a reality:

- State governments do not wish to delegate more authority to city-level institutions. Often, urban resources are transferred to rural areas in the name of development. Even if the mayor is directly elected, the state governments can refuse to devolve power and resources, effectively reducing him to a figurehead.
- Municipal commissioner also, sometimes, becomes hurdle. Even if some powers are delegated to the municipality, the state governments have in place municipal commissioners to perform the executive functions, again cutting the mayor to size, the nature of mayoral election notwithstanding.
- If a directly elected mayor belongs to a party in minority in the municipality, it becomes difficult to get other municipality members on board in taking decisions. This was witnessed in Himachal Pradesh, which ultimately led to the scrapping of this system.
- Also, a mayor executing projects will tend to gain popularity at the expense of the local legislator whose job is to legislate and scrutinise the performance of the executive. A legislator will always see the directly elected and empowered mayor as a potential future rival and will do everything in his command to undercut his authority.
- It is also widely felt that elected mayors may blur the lines between the three tiers of government: the Union, the states and the local self governments.

Sources: et.

Paper 2 Topic: Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies.

Rajiv Mehrishi appointed new CAG of India

Rajiv Mehrishi has taken charge as **the 13th Comptroller and Auditor General of India (CAG)**. He has a three-year tenure till August 2020.

About CAG:

The Comptroller and Auditor General (CAG) of India is an authority, established by **the Constitution of India under article 148**.



- **CAG audits all receipts and expenditure of the Government of India and the state governments**, including those of bodies and authorities substantially financed by the government.
- **The CAG is also the external auditor of Government-owned corporations and conducts supplementary audit of government companies**, i.e., any non-banking/ non-insurance company in which the state and Union governments have an equity share of at least 51% or subsidiary companies of existing government companies.
- **The reports of the CAG are taken into consideration by the Public Accounts Committees (PACs) and Committees on Public Undertakings (COPUs)**, which are special committees in the Parliament of India and the state legislatures.
- **The CAG enjoys the same status as a judge of Supreme Court of India** in Indian order of precedence.

Appointment: CAG is appointed by the President of India following a recommendation by the Prime Minister. On appointment, he/she has to make an oath or affirmation before the President of India.

Removal: The CAG can be removed only on an address from both house of parliament on the ground of proved misbehaviour or incapacity. The CAG vacates the office on attaining the age of 65 years age even without completing the 6 years term.

Sources: the hindu.

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

FSSAI launches online platform for food inspection, sampling

To bring in transparency in food safety inspection and sampling, food regulator Food Safety and Standards Authority of India (FSSAI) has put in place a **nationwide online platform called 'FoSCoRIS'** and has asked states to adopt this system as it would help eliminate discrepancy and make food safety officers accountable.



Key facts:

- The web-based 'FoSCoRIS' system will **help verify compliance of food safety and hygiene standards by food businesses as per the government norms.**
- The new system will bring **together all key stakeholders** — food businesses, food safety officers (FSOs), designated officers, state food safety commissioners — on a nation-wide IT platform and data related to inspection, sampling and test result data will be shared seamlessly by all the officials.
- This system will give a clear picture to the FSSAI on the real-time basis and helps eliminate any discrepancy, hence inspection is accountable. The system will ease out the process of sample collection, make it transparent and traceable and controls the quality of compliances.

Implementation:

The new system requires a **hand-held device with internet connectivity with FSOs**. FSSAI has asked those states that have already provided hand-held devices to FSOs to straightway adopt the system while other states have been asked to provide such devices to FSOs or on rental and even reimburse mobile expenses to them. The states have been told to appoint a nodal officer for this purpose and send the details of the officers of the state food authority for integrating them with FoSCoRIS.

About FSSAI:

The Food Safety and Standards Authority of India (FSSAI) has been established **under Food Safety and Standards Act, 2006** which consolidates various acts & orders that have hitherto handled food related issues in various Ministries and Departments.

- It was created for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption.
- Ministry of Health & Family Welfare, Government of India is the Administrative Ministry for the implementation of FSSAI.
- The Chairperson and Chief Executive Officer of Food Safety and Standards Authority of India (FSSAI) are appointed by Government of India.
- The Chairperson is in the rank of Secretary to Government of India.

Sources: the hindu.

Tribes India products to be sold on Amazon

To popularise the 'Tribes India' brand in national and international markets, **Trifed has signed a memorandum of understanding with Amazon Seller Services Pvt Ltd** for sale of tribal products through e-commerce giant www.amazon.in.

- As a part of the MoU, authentic tribal art and craft items crafted and sculpted by tribal artisans from all over the country will be showcased on the online portal for sale.

About TRIFED:

TRIFED is an apex organisation at National Level and **functioning under the administrative control of Ministry of Tribal Affairs**. TRIFED is serving the interests of Tribals, who are engaged in collection of NTFP and making of Tribal Art & Handicraft Products for their livelihood so as to ensure better remunerative price for their products as well as for the socio-economic betterment through Self Help Groups, Empanelled NGOs, State level Tribal Development Corporations, Forest Development Corporations for undertaking marketing development of the tribal products.

Sources: the hindu.

Directorate General of Quality Assurance Celebrates its Diamond Jubilee

Directorate General of Quality Assurance (DGQA) has completed 60 years of its existence.

- The organisation has quality assured Defence stores worth Rs. 28,878 crore during the financial year 2016-17.
- In addition, the organisation has been providing assistance to the User and Manufacturer in difficult and trying situations, warranting the technical expertise and hands-on experience.

About DGQA:

The Directorate General of Quality Assurance (DGQA) is **under Department Of Defence Production, Ministry of Defence**. This organisation is more than hundred years old and provides Quality Assurance (QA) cover for the entire range of Arms, Ammunitions, Equipments and Stores supplied to Armed Forces.

Functions:

- Apart from QA activities, the organisation is responsible for import substitution and associates with Defence Research and Development Organisation (DRDO) in the development projects.
- It also ensures Documentation, Codification and Standardisation Action for minimizing the variety of components / equipments.
- The other services rendered are promotion of small scale industries, Post procurement services, Defect Investigations and Technical Consultancy to the users, Ministry and the Production Agencies.

Sources: the hindu.

Paper 2 Topic: *Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and bodies constituted for the protection and betterment of these vulnerable sections.*

Implementation Guidelines of Pradhan Mantri Matru Vandana Yojana

The government has released the Guidelines of Pradhan **Mantri Matru Vandana Yojana**. The Prime Minister, Shri Narendra Modi had announced the pan-India implementation of this scheme w.e.f. 01st January, 2017.

- Guidelines inter-alia provide Aadhaar linkage, Direct Benefit Transfer, antenatal check-up and registration of child birth & first cycle of immunisation of the child.
- **PMMVY is implemented by the Ministry of Women & Child Development in collaboration with State Governments.**

About PMMVY:

Pradhan Mantri Matritva Vandana Yojana (PMMVY), previously **Indira Gandhi Matritva Sahyog Yojana (IGMSY)**, is a **maternity benefit program run by the government of India**.

- It is a **conditional cash transfer scheme for pregnant and lactating women of 19 years of age or above for first two live births**.
- It provides a **partial wage compensation** to women for wage-loss during childbirth and childcare and to provide conditions for safe delivery and good nutrition and feeding practices.

- In 2013, the scheme was brought under the National Food Security Act, 2013 to implement the provision of cash maternity benefit of ₹6,000 stated in the Act.
- It is Centrally Sponsored Scheme under which the cost sharing ratio between the Centre and the States & UTs with Legislature is 60:40, for North-Eastern States & three Himalayan States, it is 90:10 and 100% Central assistance for Union Territories without Legislature.

Sources: pib.

No move to fix national minimum wage at Rs. 18,000/month: Govt

Seeking to clear the air, the labour ministry has clarified that the Centre has not fixed Rs 18,000 as national minimum monthly wage under the Code on Wages Bill. It also denied any move to revise the formula of fixing wages by increasing the number of family members from three to six, as demanded by trade unions.

- The statement comes as a big relief to employers who have been “apprehensive” about the move, saying it would affect their competitiveness, but deals a blow to trade unions, who have been demanding higher minimum wages and a revised unit-based formula for fixing wages from three members of a family to six, including dependent parents.

Background:

The Minimum Wages Bill was introduced in the Lok Sabha last month. Some news reports have been published regarding the fixation of minimum wage as Rs 18,000 per month by the central government.

The Code on Wages, 2017:

It seeks to consolidate laws relating to wages by replacing: (i) the Payment of Wages Act, 1936, (ii) the Minimum Wages Act, 1949, (iii) the Payment of Bonus Act, 1965, and (iv) the Equal Remuneration Act, 1976.

- The Code will apply to establishments where any industry, trade, business, manufacturing or occupation is carried out. This will also include government establishments.
- The central government will make wage-related decisions for its authorities, and establishments related to railways, mines, and oil fields, among others. State governments will make decisions for any other establishments.
- Wages include salary, allowance, or any other component expressed in monetary terms. This will not include bonus payable to employees or any travelling allowance, among others.

Minimum Wage:

- **National minimum wage:** The central government may notify a national minimum wage for the country. It may fix different national minimum wage for different states or geographical areas. The minimum wages decided by the central or state governments will not be lower than the national minimum wage. The central or state governments will not reduce the minimum wages fixed by them, if these wages are higher than the national minimum wage.
- **Fixing the minimum wage:** The Code requires employers to pay at least the minimum wages to employees. These wages will be notified by the central or state governments. This will be based on time, or number of pieces produced, among others. The Code specifies that the central or state governments will review or revise the minimum wage every five years.
- **Working hours:** The central or state governments will fix the number of hours that will constitute a working day. Further, they will provide for a day of rest for employees every week. An employee will receive overtime for working beyond these working hours on any day. This amount will be at least twice the normal wage of the employee.

Sources: pib.

Cabinet approves Revamped Khelo India Programme

The Union Cabinet has approved the revamped Khelo India programme at a cost of Rs.1,756 crore for the period 2017-18 to 2019-20. This marks a watershed moment in the history of Indian sports, as the Programme *aims at mainstreaming sport as a tool for individual development, community development, economic development and national development.*



- The revamped Khelo India Programme would impact the entire sports ecosystem, including infrastructure, community sports, talent identification, coaching for excellence, competition structure and sports economy.

Some of the salient features of the Programme include:

- An unprecedented Pan Indian Sports Scholarship scheme, which would cover 1,000 most talented young athletes each year across select sports disciplines.
- Each athlete selected under the scheme shall receive an annual scholarship worth Rs. 5.00 lakh for 8 consecutive years.
- This is the first time ever that a long-term athlete development pathway would be made available to gifted and talented youngsters to excel in competitive sports and will create a pool of highly competitive athletes who can compete to win at the world stage.
- The Programme aims to promote 20 universities across the country as hubs of sporting excellence, which would enable talented sports persons to pursue the dual pathway of education and competitive sports.
- The Programme also aims at creating an active population with healthy life-style.
- The Programme would cover about 200 million children in the age group of 10-18 under a massive national physical fitness drive, which will not only measure the physical fitness of all children in the age group, but also support their fitness related activities.
- This programme strives **to promote “Sports for All” as well as “Sports for Excellence.”**

Sources: pib.

CARA launches monthly “Jan Sampark” Program to facilitate adoption

The Central Adoption Resource Authority (CARA) of the Ministry of Women & Child Development has started a **monthly “Jan Sampark” program** to enable the public to have interaction with its officials and staff for seeking information related to Adoption as well as flagging their concerns.

Key facts:

- The first of its kind programme was held recently in New Delhi.
- Prospective Adoptive Parents (PAPs), Adoptive Parents and representatives of agencies will participate in the event.
- Details pertaining to Immediate Placement and Special Needs Adoption Module of Child Adoption Resource Information & Guidance System (CARINGS) as well as the newly launched Grievance/Query portal will be shared with all the stakeholders in the event.
- The event also serves as a platform for counselling and motivating PAPs to go for adopting older children.
- The event will now be a regular feature every month apart from the quarterly Facebook live chat by CEO CARA.

About CARA:

Central Adoption Resource Authority (CARA) is a **statutory body of Ministry of Women & Child Development, Government of India.**

- It functions as **the nodal body for adoption of Indian children and is mandated to monitor and regulate in-country and inter-country adoptions.**
- CARA is designated as **the Central Authority to deal with inter-country adoptions** in accordance with the provisions of the Hague Convention on Inter-country Adoption, 1993, ratified by Government of India in 2003.

CARA primarily deals with adoption of orphan, abandoned and surrendered children through its associated /recognised adoption agencies.

Sources: pib.

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

Government unveils rules to tackle on-board disruptive and unruly behaviour by passengers

The Ministry of Civil Aviation has unveiled rules to tackle on-board disruptive and unruly behaviour by passengers. The DGCA has revised the relevant sections of the Civil Aviation Requirement to bring in a deterrent for passengers who engage in unruly behaviour on board aircrafts. The revision has been done in accordance with the provisions of **Tokyo Convention 1963**.

The focus has been on ensuring on board safety while maintaining an element of balance and safeguarding the interest of passengers, cabin crew and the airlines.

The new rules are as follows:

- **No- Fly list:** The new rules will allow for the formation of a national, No Fly List of unruly passengers. The promulgation of the No – Fly List in India is unique and first-of-its-kind in the world. The concept of the No-Fly List is based on the concern for safety of passengers, crew and the aircraft, and not just on security threat.
- **Applicability:** The revised CAR deals with unruly behavior of passenger on-board aircrafts. Unruly behavior of passengers at airport premises will be dealt with by relevant security agencies under applicable penal provisions. The revised CAR will be applicable for all Indian operators engaged in scheduled and non-scheduled air transport services, both domestic and international carriage of passengers. The CAR would also be applicable to foreign carriers subject to compliance of Tokyo Convention 1963.
- **What amounts to unruly behaviour?** The revised CAR defines three categories of unruly behavior – Level 1 refers to behaviour that is verbally unruly, and calls for debarment upto 3 months; Level 2 indicates physical unruliness and can lead to the passenger being debarred from flying for upto 6 months and Level 3 indicates life-threatening behaviour where the debarment would be for a minimum of 2 years.
- **Internal committee:** The complaint of unruly behavior would need to be filed by the pilot-in-command. These complaints will be probed by an internal committee to be set up by the airline. As per the CAR provisions, the internal committee will have to decide the matter within 30 days, and also specify the duration of ban on the unruly passenger. During the period of pendency of the enquiry the concerned airline may impose a ban on the said passenger. For every subsequent offence, the ban will be twice the period of previous ban.
- **Composition of the internal committee:** The internal committee will have retired District & Sessions Judge as Chairman and representatives from a different scheduled airline, passengers' association/consumer association/retired officer of Consumer Dispute Redressal Forum as Members.
- **Appeal:** The revised CAR also contains appeal provisions against the ban. Aggrieved persons (other than those identified as security threat by MHA) may appeal within 60 days from the date of issue of order to the Appellate Committee constituted by MoCA comprising of retired Judge of a High Court of India as Chairman and representatives of passengers association/consumer association/retired officer of Consumer Dispute Redressal Forum and airlines as Members.

Background:

The Tokyo Convention, which took effect in 1969, governs criminal offenses and other acts committed on board aircraft that jeopardize the safety of flights.

Sources: pib.

All states gain if rivers linked through waterways: Expert

A lot of water has gone under the bridge since the idea of interlinking of rivers was first mooted during the tenure of first Prime Minister Jawaharlal Nehru. The project which has undergone several transformations since then is yet to take shape on ground, with states perennially bickering over their share of water.

Recently, few experts have come out with an alternative method of linking rivers which can be adopted with far better results and zero disputes over the share of water.

Proposed method:

The new method envisages **a way in which the two rivers can be linked through a waterway built on an even plane enabling two-way flow between the rivers**. It is also known as **Smart Waterways**.

Benefits of this method:

Linking through waterways will grant several benefits over the traditional interlinking of rivers.

- **Increased irrigation:** It will enable the government to irrigate almost double the size of fields as compared to traditional interlinking.
- **Use of only excess water:** Unlike the traditional interlinking of rivers which involves pumping of water using a lot of electricity, this technology uses only the “excess flood water that goes to seas un-utilised” without any pumping. The new and unique proposal only harnesses the excess flood water that goes to sea unutilised, that too just 25% of flood water and 7% of water still goes to sea.
- **Other advantages:** Bi-directional flow of water, zero pumping, enabling of 15,000 km of navigation, reduction of land acquisition from eight per cent to two per cent, and 40 per cent flood control against four per cent possible under the traditional method are a few other advantages.

Sources: et.

Cabinet approves introduction of the Payment of Gratuity (Amendment) Bill, 2017 in the Parliament

The Union Cabinet has given its approval for introduction of **the Payment of Gratuity (Amendment) Bill, 2017** in the Parliament.

Key facts:

- The move aims at providing social security to workmen after retirement, whether it is because of rules of superannuation, or physical disablement or impairment of vital parts of the body.
- The Amendment will increase the maximum limit of gratuity of employees, in the private sector and in Public Sector Undertakings/ Autonomous Organizations under Government who are not covered under CCS (Pension) Rules, at par with Central Government employees.



Background:

The present upper ceiling on gratuity amount under the Act is Rs. 10 Lakh. The provisions for Central Government employees under Central Civil Services (Pension) Rules, 1972 with regard to gratuity are also similar. Before implementation of 7th Central Pay Commission, the ceiling under CCS (Pension) Rules, 1972 was Rs. 10 Lakh. However, with implementation of 7th Central Pay Commission, in case of Government servants, the ceiling now is Rs. 20 Lakhs effective from 1.1.2016.

Therefore, considering the inflation and wage increase even in case of employees engaged in private sector, the Government is of the view that the entitlement of gratuity should be revised for employees who are covered under the Payment of Gratuity Act, 1972. Accordingly, the Government initiated the process for amendment to Payment of Gratuity Act, 1972.

The Payment of Gratuity Act, 1972:

The Payment of Gratuity Act, 1972 applies to establishments employing 10 or more persons. The main purpose for enacting this Act is **to provide social security to workmen after retirement**, whether retirement is a result of the rules of superannuation, or physical disablement or impairment of vital part of the body. Therefore, the Payment of Gratuity

Act, 1972 is an important social security legislation to wage earning population in industries, factories and establishments.

Sources: pib.

Norms eased for fund raising by REITs, InvITs

The Securities and Exchange Board of India (SEBI) has relaxed the guidelines for Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs) in order to broaden the scope of fund raising by such instruments.

- It has been decided to allow REITs and InvITs to raise capital by issuing debt securities. REITs have also been allowed to lend to an underlying holding company or a special purpose vehicle (SPV).

What are REITs?

REITs are similar to mutual funds. While mutual funds provide for an opportunity to invest in equity stocks, REITs allow one to invest in income-generating real estate assets.

How does an REIT work?

REITs raise funds from a large number of investors and directly invest that sum in income-generating real estate properties (which could be offices, residential apartments, shopping centres, hotels and warehouses). The trusts are listed in stock exchanges so that investors can buy units in the trust. REITs are structured as trusts. Thus, the assets of an REIT are held by an independent trustee on behalf of unit holders.

Tax and other issues:

Short-term capital gain tax is applicable for unit holders at the rate of 15%. While interest is tax-exempt for REITs, it is taxable for unit holders. The registration charges for every purchase and sale of property is still applicable.

Sources: the hindu.

TRAI issues draft recommendations

Promoting 'ease of doing business' is essential for unhindered growth of the telecom sector. Thus, aiming to promote unhindered growth in the telecom sector, TRAI has released draft recommendations for ease of doing telecom business.

Important recommendations made:

- There should be a cap on the market share when a new company is formed through a merger. Until now the rule was to permit a merger of licenses under the premise that new firm will reduce its market share to less than 50% in a year. But that is not possible since the new operator can neither drop its subscribers from its network nor stop providing them with service.
- Also, the new company formed should pay the differential amount in spectrum license fee against the entry fee paid by the transfer company, once the telecom department has approved the merger, the regulator said in its recommendations.
- For an existing service provider, for renewal of licence or migration of its licence to Unified Licence (UL), the condition of minimum net worth should not be applicable.
- In respect of electro-magnetic field (EMF) compliance, DoT may review the need of calling biennial certification for all the existing sites of every telecom service provider (TSP). TSPs should be asked to submit all requisite certifications only through the Sanchar Tarang portal.
- DoT should devise a suitable matrix, linking the penalty to the severity of the incident and the number of occurrences of the violation for imposition of financial penalties.

About Trai:

- It is the independent regulator of the telecommunications business in India.
- It was established in 1997 by **an Act of Parliament to regulate telecom services and tariffs in India.**
- In January 2000, TRAI act was amended to establish the Telecom Disputes Settlement Appellate Tribunal (TDSAT) to take over the adjudicatory functions of the TRAI.

- The TDSAT was set up to resolve any dispute between a licensor and a licensee, between two or more service providers, between a service provider and a group of consumers. In addition, any direction, TRAI orders or decisions can be challenged by appealing to TDSAT.

Sources: et.

Banks can classify priority loans as standard debt: RBI

The Reserve Bank of India has **assured banks that they can classify priority loans extended to defaulting companies in the bankruptcy process as standard debt** in a move aimed at ensuring that entities which can be revived are able to raise resources. This will come as a relief to those companies that are struggling to recast loans within the strict deadline imposed by the Insolvency and Bankruptcy Code.

- The central bank has however said this classification will be allowed only if repayments are made every month rather than later in the form of bullet payments or after a few months.

Background:

The banks had sought a clarification on the difference in treatment of such loans by banks and finance companies. Priority loans take precedence over other forms of debt and are repaid before other loans in the event of liquidation.

Priority sector lending:

Priority Sector Lending is an important role given by the Reserve Bank of India (RBI) to the banks for providing a specified portion of the bank lending to few specific sectors like agriculture or small scale industries. This is essentially meant for an all round development of the economy as opposed to focusing only on the financial sector. Typically, these are small value loans to farmers for agriculture and allied activities, micro and small enterprises, poor people for housing, students for education and other low income groups and weaker sections.

What is meant by Priority Sector?

Priority sector refers to those sectors of the economy which may not get timely and adequate credit in the absence of this special dispensation.

Sources: et.

Govt launches 'Pradhan Mantri LPG Panchayat' to boost PMUY

The Central government has launched a **country-wide LPG Panchayat as a backup to the Pradhan Mantri Ujjwala Yojana** to distribute LPG connections among the rural areas where conventional fuel is used for domestic purposes.

About LPG Panchayat:

The LPG Panchayat is **an interactive communication platform aimed at educating rural LPG users about proper safety precautions to be taken while using LPG**, its benefit to the environment, its effect on women empowerment and health.

- With this, the government aims to reach the doorsteps of poor and under-privileged women to educate them about the safety and efficiency, health benefits, positive impact on environment, economic development and empowerment on usage of LPG connections.
- One lakh LPG Panchayats would be activated across the country under the scheme during the next one and a half years. The idea of this platform is to trigger a discussion through sharing of personal experiences on the benefits of use of clean fuel compared to traditional fuels like cowdung.
- The agenda would also include safe practices, quality of service provided by distributors and availability of refill cylinders.

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.

- Under the scheme, an adult woman member of a below poverty line family identified through the Socio-Economic Caste Census (SECC) is given a deposit-free LPG connection with financial assistance of Rs 1,600 per connection by the Centre.

- 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.

Sources: the hindu.

Karnataka govt invokes ESMA against garbage contractors

The Karnataka government has invoked **the Essential Services Maintenance Act** against garbage contractors and sanitation workers employed under them following complaints that they were not discharging their duties. The law has been invoked for a year to ensure that waste is removed from the city.

Background:

The garbage problem has turned worse in Bengaluru recently as the contractors have allegedly stopped removing the waste, causing a huge pileup that has left many important places stinking and brought the city civic body Bruhat Bengaluru Mahanagara Palike in the line of fire.

About ESMA:

The Essential Services Maintenance Act (ESMA) is an act of Parliament of India. It is a central law.

- It was established to ensure the delivery of certain services, which if obstructed would affect the normal life of the people. These include services like public transport (bus services), health services (doctors and hospitals).
- Although it is a very powerful law, **its execution rests entirely on the discretion of the State government**. Each state in the union of India, hence has a separate state Essential Services Maintenance Act with slight variations from the central law in its provisions. This freedom is accorded by the central law itself.

Sources: the hindu.

The lowdown on the petrol pricing policy

Amid protests against the recent spike in petrol and diesel prices, the government has ruled out the possibility of an end to the recently introduced policy of revising fuel prices daily.

Background:

Since June 16 this year, petrol and diesel prices across the country have been revised on a daily basis, against the previous policy of revising prices every fortnight. By opting for daily pricing, India has joined advanced countries like the United States and others which follow the practice.

How did it come about?

The daily pricing policy is in line with the government's efforts over the years to deregulate the pricing of essential fuels. The prices of petrol and diesel were first deregulated in 2010 and 2014 respectively, bringing in the practice of fortnightly revision of prices.

What's good about the new policy?

The new daily pricing policy, the government argues, will now allow oil marketing companies to price their products even better, that is, in accordance with their fluctuating input costs. The oil companies need not wait a fortnight to change prices, and it is believed that this would allow them to quickly pass on the benefit of lower crude oil prices to retail customers. Also, daily price revisions will reduce the risk of huge revisions in prices, which is more common under the fortnightly pricing policy.

Why is it being opposed?

The daily pricing policy has been blamed in recent weeks for the sharp increase in petrol and diesel prices. Fuel prices fell in the initial days after the implementation of the new policy, but have seen a sharp acceleration ever since. The price of petrol in metro cities like Delhi and Kolkata, for instance, has risen by more than ₹5 since the introduction of daily pricing. The government has blamed supply constraints due to floods in the United States for the present rise in



prices. A wider criticism, however, is that domestic fuel prices have also failed to match the drastic fall in international crude oil prices over the last few years. The surprising divergence in the cost of crude oil and domestic fuel prices has caused a lot of anger.

What can be done now?

Taxes are the main culprit stopping petrol and diesel prices from reflecting the fall in international crude oil prices. About half the retail price paid by consumers for petrol and diesel goes towards paying the excise duty and the value added tax imposed on them. These taxes increase the price at which oil companies can profitably sell essential fuels to consumers, thus restricting supply and keeping prices high.

- **One option is to reduce VAT on petroleum products.** But, for this, states have to forgo their share of the Centre's revenue from fuel taxes. 42% of the Central tax receipts from petrol go to the States.
- **Another option is to bring petrol and diesel under the GST to lower the tax burden.** This will help bring down their prices, but only when it is combined with better competition in the oil sector. Otherwise, lower taxes will merely improve the profits of oil companies without any of the benefits, whether it is lower crude oil prices or any other fall in input costs, being passed on to consumers.

Way ahead:

What is being missed is the fact that fuel prices are determined by market forces, not costs. So lower crude oil prices need not necessarily lead to lower fuel prices. Costs only determine the profits of oil companies, whose operating margins have naturally improved since deregulation.

Sources: the hindu.

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

National Nutrition Week

The National Nutrition Week will be observed throughout the country from 1st to 7th September.

Theme: The theme of the National Nutrition Week for 2017 is "Optimal Infant & Young Child Feeding Practices: Better Child Health".

Objective: The basic objective of this annual event is to intensify awareness generation on the importance of nutrition for health which has an impact on development, productivity, economic growth and ultimately National development.



Key facts:

- During this week, the Food and Nutrition Board of Ministry of Women & Child Development will coordinate with concerned Department of the State/UT Governments, National Institutions, NGOs and organize State/UT Level Workshops, Orientation Training of Fields Functionaries, Awareness Generation Camps, Community meetings during the week on the specified theme.
- Large numbers of State, district and village level activities are being organized during this week. One day workshops will be held to sensitize and for capacity building of State/Districts Level officers on importance of nutrition for better health.

Significance of right nutrition:

Nutrition is an issue of survival, health and development for current and succeeding generations. Child born underweight have impaired immune function and increased risk of diseases such as diabetes and heart diseases in their later life. Malnourished children tend to have lower IQ and impaired cognitive ability, thus affecting their school performance and then productivity in their later life. It has to be realized that the nutritional health and all age groups represent say National Economic Asset. Therefore, improving the nutritional status of the population is imperative for National Development.

Concerns:

Undernutrition in young children continues to be a major public health problem in India. The NFHS4 has not shown an encouraging improvement in the nutritional status, especially among women and children. As per NFHS-4 the level of underweight has decreased by 6.8% and is stunting by 9.6%. Level of anaemia has decreased by 11% as compared to NNHS-3 figures.

Way ahead:

Malnutrition is not to be viewed merely as an offshoot of poverty having adverse effects on health and development of individuals but as a national problem that results in loss of productivity and economic backwardness. Time has come to create a moment so as to improve nutrition at the individual level. Thus, series of convergent and well coordinated actions in different sectors are required to be undertaken in the mission mode approach to address this big network problem of malnutrition.

Sources: pib.

National Nutrition Strategy

With a renewed focus on nutrition, **NITI Aayog has launched the National Nutrition Strategy.**

Need for the National Nutrition Strategy:

The recently published NFHS-4 results reflect some progress, with a decline in the overall levels of under nutrition in both women and children. However, the pace of decline is far below what numerous countries with similar growth trajectories to India have achieved. Moreover, India pays an income penalty of 9% to 10% due to a workforce that was stunted during their childhood. To address this and to bring nutrition to the centre-stage of the National Development Agenda, NITI Aayog has drafted the National Nutrition Strategy. Besides, with a benefit to cost ratio of 16:1 for 40 low and middle-income countries, there is a well recognized rationale, globally, for investing in Nutrition.

Highlights of the strategy:

Formulated through an extensive consultative process, the Strategy lays down a roadmap for effective action, among both implementers and practitioners, in achieving our nutrition objectives.

The nutrition strategy envisages a framework wherein the four proximate determinants of nutrition – uptake of health services, food, drinking water & sanitation and income & livelihoods – work together to accelerate decline of under nutrition in India. Currently, there is also a lack of real time measurement of these determinants, which reduces our capacity for targeted action among the most vulnerable mothers and children.

Focus on behavioural change: Supply side challenges often overshadow the need to address behavioural change efforts to generate demand for nutrition services. This strategy, therefore, gives prominence to demand and community mobilisation as a key determinant to address India's nutritional needs.

Decentralized efforts: The Nutrition Strategy framework envisages a Kuposhan Mukh Bharat – linked to Swachh Bharat and Swasth Bharat. The aim is to ensure that States create customized State/ District Action Plans to address local needs and challenges. This is especially relevant in view of enhanced resources available with the States, to prioritise focussed interventions with a greater role for panchayats and urban local bodies. The strategy enables states to make strategic choices, through decentralized planning and local innovation, with accountability for nutrition outcomes.

Sources: pib.

International Literacy Day – 2017

The **51st International Literacy Day** is being celebrated on 8th September, 2017 and the **theme announced by UNESCO is 'Literacy in a digital world'**.

Background:

The International Literacy Day is celebrated on 8th September every year throughout the world. On this day, in the year 1965 **the World Congress of Ministers of Education met in Tehran for the first time to discuss the programme of education at the international level.**

- **The UNESCO in its 14th Session in November, 1966, declared 8th September as the International Literacy Day.** Since then, ILD is celebrated on 8th September every year by most of the member countries.

- The key aspect of the observance of ILD is to mobilize public opinion in favour of struggle against illiteracy. ILD is a forum to disseminate information on literacy and raise the public awareness and the significance of literacy for individual and national development.

Literacy rate in India:

As per Educational Statistics for 2015-16, the literacy rate in India increased to 69.3% in 2011. In comparison to 2001, when the literacy rate was 61.0%, the improvement is decent.

- A dramatic improvement is seen in the literacy rate of female population which improved from 47.8% in 2001 to 59.3% in 2011. Among males, the literacy rate has improved from 73.4% in 2001 to 78.8% in 2011.
- Though the literacy rate has been on an upward trajectory in the past decade, the overall literacy rate in India is still lower than the global rate. Compared to the global youth literacy rate of 91%, India lags far behind with 69.3%.

Way ahead:

The international community already has its eyes on 2030 with Sustainable Development Goals (SDGs) and has aimed to “ensure inclusive and quality education for all and promote lifelong learning” within its goals.

Sources: pib.

Times Higher Education World University Rankings 2018

The Times Higher Education World University Rankings 2018 of top 1,000 universities in the world has been released.

Key facts:

- **UK led the rankings with University of Oxford retaining first position.** The University of Cambridge climbed two places to second, overtaking California Institute of Technology and Stanford University, both joint third. The United States continued to dominate the rankings.
- **China is the only BRICS nation that has advanced dramatically;** it is now the fourth most-represented nation in the table, with 60 universities, including seven in the top 200, up from four last year.

Performance of Indian institutions:

- Some of the premier Indian institutes such as IIT Delhi and IISc Bangalore have slide down in the rankings to lower bands. Not a single Indian institute was able to make it to the top 100 list.
- This year, India's representation has also declined, from 31 institutions to 30, while eight of its universities have slipped to a lower band.
- Indian Institute of Science (IISc) has been placed in 251-300 category. The Indian Institute of Technology (IIT) Bombay has been listed 351-400 category.
- Indian Institute of Technology (IIT) Delhi, Indian Institute of Technology (IIT) Kanpur, Indian Institute of Technology (IIT) Kharagpur and Indian Institute of Technology (IIT) Roorkee have been listed in 501-600 category.
- Aligarh Muslim University, Banaras Hindu University, University of Delhi and Indian Institute of Technology Guwahati made it to the 601-800 list.

Sources: the hindu.

Why infections picked up in hospitals are the big threat today, how world is trying to cope

A Bengaluru firm has become **India's first to receive the international CARB-X grant to develop antibiotics to treat hospital-acquired infections.**

What is CARB X?

CARB-X, or Combating Antibiotic Resistant Bacteria Biopharmaceutical Accelerator, is a **public-private international partnership**, which was set up in 2016 to focus on innovations to



improve diagnosis and treatment of drug-resistant infections. It grew out of President Barack Obama's 2015 Combating Antibiotic Resistant Bacteria (CARB) initiative, and is funded by the London-based biomedical research charity Wellcome Trust, and the Biomedical Advanced Research and Development Authority (BARDA) of the US Department of Health and Human Services.

What is it for?

The partnership provides a new, collaborative approach to speed research, development and delivery of new antibiotics, vaccines, diagnostics, and other innovative products to address the urgent global problem of drug-resistant bacterial infections. CARB-X will provide grants up to \$ 455 million (over Rs 2,900 crore) over a five-year period to firms across the globe for antibiotics R&D.

All CARB-X funding so far is focused on projects **to address the most resistant "Gram-negative" bacteria.**

What are Gram-negative bacteria?

Bacteria are classified as Gram-positive and Gram-negative, based on a structural difference in their cell walls that is detectable through a staining technique developed in 1884 by the Danish bacteriologist Hans Christian Gram. Gram-negative bacteria are responsible for 20-25% of infections, and are multi drug resistant — which is the ability of bacteria to defend themselves against drugs that try to kill them.

Background:

Antibiotic resistance has become a global crisis that threatens the management of infections, both in the community and in hospital practice. The major reasons are the indiscriminate use of antibiotics, including against viral infections, especially in countries like India where they are commonly available over the counter; their prolonged use in patients admitted to hospitals; and their abuse in animal husbandry as growth promoters. Cheaper antibiotics such as penicillin, tetracycline or co-trimoxazole can often no longer cure an infection, and high-end ones like third- and fourth-generation cephalosporin and carbapenem are commonly used, doctors in India believe. In hospital critical care units, more than 50% organisms are now resistant even to these drugs.

Sources: ie.

All set for NIRF ranking exercise next year

The Centre has set the ball rolling for a more comprehensive ranking of higher educational institutions in the next round of the National Institutional Ranking Framework in 2018.

- The idea: instead of institutions choosing to take part in the exercise, they are being auto-registered through a large online database — the All-India Survey on Higher Education (AISHE) portal — of institutions available with the Ministry of Human Resource Development.
- The institutions, however, have to provide details like patents, publications, research projects and campus placements that are not available on the portal.

Background:

The 2016 and 2017 NIRF lists reflected the ranks of only those institutions that had taken part in the exercise. The number was about 3,300 in 2017. **Among universities, Indian Institute of Science in Bangalore was ranked first and Jawaharlal Nehru University in Delhi was second. Miranda House in Delhi was ranked India's best college.**

What is NIRF?

The National Institutional Ranking Framework (NIRF) was 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" and "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.

Sources: the hindu.

India at 103 rank on Global Human Capital Index

The Global Human Capital Index for the year 2017 has been released by WEF.

About GHC Index:

The Global Human Capital Index 2017 ranks 130 countries on how well they are developing their human capital on a scale from 0 (worst) to 100 (best) across four thematic dimensions and five distinct age groups to capture the full human capital potential profile of a country. It aims to be used as a tool to assess progress within countries and point to opportunities for cross-country learning and exchange.

- **The list compiled by Geneva-based World Economic Forum (WEF)** takes into account “the knowledge and skills people possess that enable them to create value in the global economic system” to measure the ‘human capital’ rank of a country.
- The report measures 130 countries against **four key areas of human capital development**; Capacity (determined by past investment in formal education), Deployment (accumulation of skills through work), Development (continued upskilling and reskilling of existing workers) and Know-how (specialised skills-use at work).

Performance of India:

- **India has been placed at a low 103 rank**, the lowest among BRICS economies. India also ranks “among the lowest in the world” when it comes to the employment gender gap, but has fared well when it comes to development of skills needed for the future with a rank of 65 out of total 130 countries surveyed.
- Among the South Asian countries also, India was ranked lower than Sri Lanka and Nepal, although higher than neighbouring Bangladesh and Pakistan.
- India is held back by a number of factors, including low educational attainment (primary education attainment among 25 -54 year olds is 110th for example) and low deployment of its human capital, meaning the skills available are not getting put to good use.

Performance of other countries:

- The overall list was topped by Norway, followed by Finland and Switzerland in the second and third place respectively.
- Other countries in the top 10 include, the United States (4th), Denmark (5th), Germany (6th), New Zealand (7th), Sweden (8th), Slovenia (9th) and Austria (10th).

Sources: et.

Supreme Court for open air jails, better treatment for prisoners

The Supreme Court of India has passed a slew of directions on prison reforms. The court is hearing a 2013 PIL on prevailing inhuman conditions prevailing in 1,382 prisons across the country.

Key directions:

- All high courts have to register a ***suo motu* petition** to identify kin of prisoners who admittedly died an unnatural death after 2012 and award suitable compensation to them.
- All state governments should **appoint counsellors and support persons** for counselling prisoners, particularly first-time offenders.
- States should also study **the availability of medical assistance** to prisoners and take remedial steps wherever necessary.
- The Ministry of Woman and Child Development has been asked to discuss with the official concerned of the state governments “and *formulate procedures for tabulating the number of children (if any) who suffer an unnatural death in child care institutions where they are kept in custody either because they are in conflict with law or because they need care and protection*”.
- The Centre has **to ensure circulation of its model prison manual**, a monograph prepared by the National Human Rights Commission on suicides in prisons, and the Nelson Mandela Rules and guidelines on investigating deaths in custody issued by the International Committee of the Red Cross within one month to prison incharges of every states.

- The states should **conduct training and sensitisation programmes for senior police officers of all prisons** on their functions, duties and responsibilities and the rights and duties of prisoners.
- The government may consider extending the time or frequency of meetings by the family of a prisoner and explore the possibility of using phones and video conferencing for communication, also with their counsel.

Background:

The management of prisons falls exclusively under the domain of the state government, as per the seventh schedule of the constitution. In every state, the prison administrative machinery works under the chief of prisons who is a senior ranking IPS officer.

Need for reforms:

NHRC figures show that prisoners cut off from family and friends had a 50% more chance of committing suicide than those outside. The average suicide rate among the general public for this period is 11 (per 100,000) whereas the average suicide rate in prison is 16.9 (per 100,000). In other words, the average suicide rate in prisons is over 50% more than in normal conditions.

- Indian prisons face three long-standing structural constraints: overcrowding, thanks to a high percentage of undertrials in the prison population, understaffing and underfunding. The inevitable outcome is sub-human living conditions, poor hygiene, and violent clashes between the inmates and jail authorities.
- Besides, while 33% of the total requirement of prison officials still lies vacant, almost 36% of vacancy for supervising officers is still unfulfilled. In the absence of adequate prison staff, overcrowding of prisons leads to rampant violence and other criminal activities inside the jails.

Way ahead:

Indian jails have often been dubbed as a university for grooming criminals due to pathetic and inhumane conditions. In the absence of a robust Whistleblower Protection Act and structural changes to address the issues of overcrowding and understaffing, India's prisons will continue to be heaven for politically connected criminals and hell for socio-economically disadvantaged undertrials, some regular media uproars notwithstanding.

Fundamental rights of prisoners cannot be placed in the back-burner and the Centre and the states need to be more pro-active in sensitising staff about the need to treat prisoners as humanely as possible.

Sources: the hindu.

SATH- Sustainable Action for Transforming Human Capital

SATH- Sustainable Action for Transforming Human Capital, a joint initiative of Government of Assam and NITI Aayog, has been launched.

Aim of the programme: The programme aims to provide structured support to Assam in identifying key health priorities and implement the solutions towards transforming the health and improving the well-being of people of Assam.

Background:

The SATH program embodies the philosophy of co-operative federalism. NITI Aayog selected the three states through a three stage challenge-process – expression of interest, presentations by the states and assessment of commitment to health sector reforms. Finally, three states: Assam, Uttar Pradesh and Karnataka were chosen based on objective assessment criteria affecting the potential for impact and likelihood of success. A consortium of reputed technical consultants are closely working with NITI Aayog and the states to conceptualize the initiatives and provide support in the implementation process.

About SATH programme:

Furthering the agenda for cooperative federalism, NITI Aayog has launched SATH, a program providing 'Sustainable Action for Transforming Human capital' with the State Governments. The vision of the program is to initiate transformation in the education and health sectors. The program addresses the need expressed by many states for technical support from NITI.

- SATH aims to identify and build three future 'role model' states for health systems.



- NITI will work in close collaboration with their state machinery to design a robust roadmap of intervention, develop a program governance structure, set up monitoring and tracking mechanisms, hand-hold state institutions through the execution stage and provide support on a range of institutional measures to achieve the end objectives.
- The program will be implemented by NITI along with McKinsey & Company and IPE Global consortium, who were selected through a competitive bidding process.

Sources: pib.

Deendayal Hastkala Sankul

Deendayal Hastkala Sankul – a trade facilitation centre for handicrafts – was recently inaugurated at Varanasi.

About deendayal Hastkala Sankul:

The Sankul will facilitate the weavers/artisans/exporters in promotion of handlooms/handicrafts in both domestic and international markets. The Crafts Museum in the Sankul will preserve the traditional handloom/handicrafts products of Varanasi and showcase the handloom & handicraft products, which will be an inspiration for the new generation, scholars, designers and tourists.

Background:

The Finance Minister in the Budget 2014-15 had announced setting up of a Trade Facilitation Centre and a Crafts Museum to develop and promote handlooms, handicrafts and silk products of Varanasi and to provide necessary help to weavers, artisans and entrepreneurs of Varanasi in strengthening their marketing activities in domestic as well as international markets and in carrying forward the rich tradition of handlooms at Varanasi.

Benefits of this move:

- Promotes rich traditional craft of ancient Varanasi.
- Provides enabling platform and environment to showcase Indian handloom and handicrafts.
- Provides supply chain linkages to domestic and foreign buyers.
- Give thrust to domestic and international tourism.
- Give boost to trade and economic development of Varanasi as well as eastern parts of the country.

Sources: pib.

Bharat ke Kaushalzaade

Rural Skills Division, Ministry of Rural Development has organized '**Bharat ke Kaushalzaade**', an event honouring beneficiaries of its key skilling programmes, on the eve of Antyodaya Diwas 2017.

The event **aims to celebrate and honour beneficiaries from both of MoRD's flagship skill development programmes i.e. Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) and Rural Self Employment Training Institutes (RSETI).**

'Kaushal Panjee':

The event also witnessed the mobilization platform launch, branded '**Kaushal Panjee**' (Skill Register).

- It aims to be citizen centric end-to-end solution to aid mobilization of candidates for RSETIs and DDU-GKY.
- It facilitates mobilization of candidates through Self Help Group members, Gram Panchayat Functionaries, Block Officials, CSCs and directly by the candidate.
- RSETIs and DDU-GKY Partners can access the Kaushal Panjee to connect with the mobilized rural youth.
- Kaushal Panjee is connected to the Social Economic Caste Census (SECC 2011) which will help the States plan and target their mobilizations based on the socio-economic profile of households in their State.

About DDU GKY:

The Ministry of Rural Development (MoRD) announced the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) Antyodaya Diwas, on 25th September 2014. DDU-GKY is a part of **the National Rural Livelihood Mission (NRLM)**,

tasked with the dual objectives of adding diversity to the incomes of rural poor families and cater to the career aspirations of rural youth.

DDU-GKY is uniquely **focused on rural youth between the ages of 15 and 35 years** from poor families. As a part of the Skill India campaign, it plays an instrumental role in supporting the social and economic programs of the government like the Make In India, Digital India, Smart Cities and Start-Up India, Stand-Up India campaigns.

Sources: pib.

Government launches negotiable warehousing receipts in e-format

The government has rolled out negotiable warehousing receipts in electronic format that farmers can use to avail of bank credit easily and without fear of losing or misusing it.

Benefits of e receipts:

Till now, the receipts were issued manually. Now, it will be given in an electronic format, which will not only benefit farmers, but banks and other stakeholders.

- Farmers will not have to worry about losing the receipt — which has details of the quantity, quality and the warehouse where the commodity is stored — as it will be uploaded online and will be accessible to banks while sanctioning loan.
- This will also stop farmers from taking multiple bank loans on a single receipt.

What are Negotiable Warehouse Receipts?

Negotiable warehouse receipt, which was launched in 2011, allows transfer of ownership of that commodity stored in a warehouse without having to deliver the physical commodity. These receipts are issued in negotiable form, making them eligible as collateral for loans.

Warehouse receipts are made **negotiable under the Warehouse (Development and Regulation) Act, 2007, and regulated by the Warehousing Development and Regulatory Authority (WDRA).**

Sources: the hindu.

Govt data shows India's infant mortality rate has declined 8%

The latest data from Sample Registration Survey (SRS) show that India's infant mortality rate (IMR) declined from 37 per 1000 live births in 2015 to 34 per 1000 live births in 2016. However, there is still a long way to go to meet the 2019 target of IMR 28 per 1000 live births.

What is IMR?

Infant mortality rate (IMR) is the number of deaths per 1,000 live births of children under one year of age.

Key facts:

- There has been a significant 8% decline in country's IMR, even though more infants are dying in the rural areas. IMR in rural India is 38 per 1000 live births as compared to 23 in the urban areas.
- The data shows 90,000 fewer infants died in 2016 as compared to 2015. The total number of estimated infant deaths has come down from 9.3 lakh in 2015 to 8.4 lakh in 2016.
- What is more encouraging is that the gender gap in India for child survival is reducing steadily. The data shows that the gender difference between female and male IMR has reduced to below 10%.
- The government's family planning programme seems to be going in the right direction, with the data showing a major drop in number of estimated births in a year which has come down to below 2.5 crore from 2.6 crore.

Medical causes of infant mortality

Neonatal mortality (0-4 weeks)	Post-neonatal mortality (1-12 months)
1. Low birth weight and prematurity 2. Birth injury and difficult labour 3. Sepsis 4. Congenital anomalies 5. Haemolytic diseases of newborn 6. Conditions of placenta and cord 7. Diarrhoeal diseases 8. Acute respiratory infections 9. Tetanus	1. Diarrhoeal diseases 2. Acute respiratory infections 3. Other communicable diseases 4. Malnutrition 5. Congenital anomalies 6. Accidents



Significance of these findings:

The results signify that the strategic approach of the government has started yielding dividends and the efforts of focusing on low performing states is paying off. The countrywide efforts to increase the health service coverage through various initiatives, including strengthening of service delivery and drugs and diagnostics have worked well.

Sources: et.

***Paper 2 Topic:** Development processes and the development industry the role of NGOs, SHGs, various groups and associations, donors, charities, institutional and other stakeholders.*

Northeast Venture Fund

In a bid to make Northeast a favourite destination for young Startups, the government has invited young start-ups to avail the benefits of Northeast Venture Fund. With its vast unexplored avenues, those looking for livelihood will soon find a potential enterprise in the Northeast, particularly in fruit, food, handicraft and tourism industry.

About Northeast Venture Fund:

In addition to the provisions of tax holiday and exit period available in the Government of India's "Standup India, Startup India" programme, **the Ministry of DoNER has also rolled out "Venture Fund" for anybody who wishes to Startup in the Northeast region**, which would provide a huge financial relief particularly to young entrepreneurs.

- Northeast Venture Fund is **the first dedicated venture capital fund for North-Eastern region** and the initiative to set it up began in April this year.
- It has been set up by **North Eastern Development Finance Corporation Ltd (NEDFi)**, which already has the mandate to encourage entrepreneurship in the region, primarily by offering support to the first-generation entrepreneurs. In addition, the NEDFi also performs the role of hand-holding and capacity building.

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.*

Diksha Portal

The government has launched Diksha Portal "diksha.gov.in" – National Digital Infrastructure for Teachers. Through this portal, all teachers across the nation will be equipped with advanced digital technology.

Key facts:

- DIKSHA Portal is **an initiative of HRD ministry** for providing a digital platform to teacher to make their lifestyle more digital.
- Diksha portal launched with a tagline **"National Digital Infrastructures for Our Teacher Our Teacher"**.
- The portal will consist the whole teacher's life cycle – from the time they were enrolled as student teachers in Teacher Education Institutes (TEIs) to after they retire as teachers.
- Teacher can learn and train themselves for which assessment resources will be available. The complete work and accomplishment of teachers in Teacher's educational institutes will be recorded from start to end point till their retirement.

Teacher can use the portal for creating the following:

- Teacher training content.
- Teacher profile.
- In-class resources.
- Assessment aids.
- News and announcement.
- Teacher community.

Benefits of this portal:

- It will help teachers boost their teaching skills and create their own profile with their skills and knowledge.
- Diksha portal will help in improving the quality of education with the use of latest technologies in the domain of sector. Not only the government, private institutes and NGO's are also allowed to participate in the Diksha initiative.

Sources: pib.

Private member's bill proposes MPs also declare assets after term ends

A bill for parliamentarians to declare their assets at the end of their tenure has been proposed. **The Representation of The People Act (Amendment) Bill, 2017**, will be presented in the Winter Session of Parliament this year. This bill aims to ensure accountability and transparency.

Highlights of the Bill:

- The bill proposes that Members of Parliament declare their assets within 90 days after their tenure ends. This provision is to be inserted **as sub section 75B (1) in the 'Representation of People Act, 1951'**.
- The proposed amendment in the parent act will help in maintaining transparency and accountability of people's representatives at the apex level. It will also help in creating a positive atmosphere of corruption-free status of MPs.

Present scenario:

At present, elected candidate of the two Houses of Parliament have to declare their assets and liabilities within ninety days from the date on which they take their seat. However, there are no such provisions for declaration of assets and liabilities after the expiry of the term.

Background:

The bill comes in the wake of Supreme Court observations earlier this month on the issue, after it was irked over the non-disclosure of action on jumps in politicians' assets. The Supreme Court took strong exception to the Centre's attitude of not disclosing information on action taken by it against politicians, some of whose assets had seen a massive jump of up to 500% between two elections, and had directed the government to place the necessary information in this regard before the court.

Sources: the hindu.

State-funding of polls

Former Chief Election Commissioner (CEC) T S Krishnamurthy has pitched for state-funding of elections, and banning the use of funds by political parties for polls, as part of electoral reforms. He has also mooted creation of a national election fund to which companies and individuals can contribute. This is mainly aimed at ensuring that there is no connection between political parties and corporate.

What is state or public funding of elections?

This means that government gives funds to political parties or candidates for contesting elections. Its main purpose is to make it unnecessary for contestants to take money from powerful moneyed interests so that they can remain clean. In some countries, state funding is extended to meeting some specific forms of spending by political parties, not confined to electioneering alone. Countries keep changing laws relating to state funding depending on experience and financial condition.

Why public funding is good?

- Political parties and candidates need money for their electoral campaigns, to keep contacts with their constituencies, to prepare policy decisions and to pay professional staff. Therefore, public funding is a natural and necessary cost of democracy.
- Public funding can **limit the influence of interested money** and thereby help curb corruption.

- Public funding can **increase transparency** in party and candidate finance and thereby help curb corruption. If parties and candidates are financed with only private funds, economical inequalities in the society might translate into political inequalities in government.
- In societies where many citizens are under or just above the poverty line, they cannot be expected to donate large amounts of money to political parties or candidates. If parties and candidates receive at least a basic amount of money from the State the country could have a functioning multi-party system without people having to give up their scarce resources.

Arguments against state funding:

There are divergent views on the efficacy of state funding of elections. Some have been dismissive of the idea. Those against this idea wonder how a Government that is grappling with deficit budgets, can provide money to political parties to contest elections.

- They also warn that state funding would encourage every second outfit to get into the political arena merely to avail of state funds.
- Also, given that state expenditure on key social sectors such as primary healthcare is “pitifully small”, the very idea of the Government giving away money to political parties to contest polls, is revolting. Therefore, opponents ask the government to channelize public resources towards and not diverted from such essential services.

Way ahead:

Poll funding has been a source of funnelling black money and cleaning up the poll process is necessary. Looking at the number of parties in India, it is easy to suspect that some of them have been floated by national or state parties to park their income from dubious sources, because such parties are not subject to the Election Commission’s scrutiny. The current form of political funding has become a burden on the economy. Many parliamentarians have raised concerns over the use of excessive money in election campaigns. This presents the government with the best chance to carry out significant anti-corruption reforms in the history of independent India.

Sources: et.

‘PENCIL’ Portal On Child Labour Elimination

The government has launched a web portal called ‘PENCIL’ **for effective implementation of the National Child Labour Project, (NCLP).**

About PENCIL portal:

- PENCIL (Platform for Effective Enforcement for No Child Labour) — an electronic platform for no child labour in the country is being developed by **the Labour Ministry**.
- PENCIL portal has five components — Child Tracking System, Complaint Corner, State Government, National Child Labour Project and Convergence.

About NCLP:

The National Child Labour Project (NCLP) Scheme initiated in the in 1988 to rehabilitate working children by eliminating all forms of child labour through identification and withdrawal of all children in the Project Area from child labour, Preparing children withdrawn from work for mainstream education along with vocational training. NCLP has been revised expanded and aligned to the new legislative provisions.

The legislative changes have been accompanied by creation of additional institutional mechanisms at the district, state and national level for identification and rescue, along with revamping the rehabilitation scheme and a centralized database for case to case monitoring and accountability.

Sources: pib.

‘Divyang Sarathi’

The government has launched ‘Divyang Sarathi’—The accessible and comprehensive mobile application for easy dissemination of information to ‘Divyangjans’. According to the Census 2011, there are over 2.68 crore ‘Divyangjans’ in India which constitute more than 2.2% of the population.

Key facts:

- This mobile application aims at providing all relevant information pertaining to the Department of Empowerment of Persons with Disabilities (DEPWD), Ministry of Social Justice and Empowerment, including its various acts, rules, regulations and guidelines, schemes, information about the various outreach institutions, employment opportunities, and the disability market in an accessible format.
- This mobile will help empower the 'Divyangjans' by providing easier and convenient access of information to them as they can now understand all details pertaining to the schemes, scholarships, statutes, institutional support systems and other relevant and crucial information at the click of a button.
- The unique features of the mobile application 'Divyang Sarathi' are its audio notes (text-to-voice conversion software) embedded in the application which converts the written information into an audio file as well as the adjustable font size which can be altered as per the user's requirement.
- The mobile application 'Divyang Sarathi' is compliant with the principles of UNCRPD for Universal Access and the provisions of the Rights of Persons with Disabilities Act, 2016. The Act mandates that all information to be made available in an accessible form.
- The application is also an integral part of the ICT component of the Accessible India Campaign.

Sources: pib.

VVPAT to be used in Gujarat polls

The Election Commission of India will use Voter Verifiable Paper Audit Trail (VVPAT) gadgets with Electronic Voting Machines (EVM) in all 50,128 voting booths in Gujarat, which goes to the Assembly polls at the end of this year.

This is the first time an entire assembly poll will be conducted using EVMs equipped with VVPAT.

What is VVPAT?

VVPAT stands for Voter-Verified Paper Audit Trail. VVPAT system maintains a physical trail of all votes cast. Small slips of paper records the details of the vote. The Election Commission (EC) first introduced VVPAT in the 2014 Lok Sabha elections.

How is it related to EVMs?

When a vote is cast on the electronic voting machine, a small paper slip bearing the name and symbol of the candidate is generated. This paper appears for about 10 seconds. The slip will then automatically fall in a sealed safe box, attached to the EVM, thus maintaining a physical paper trail of all the votes cast.

Background:

In 2013, conduct of Election Rules, 1961 was amended to facilitate the introduction of VVPAT units. For the first time, VVPAT with EVMs was used for the Noksen Assembly seat in Tuensang district of Nagaland.

In the case of Subramanian Swamy vs Election Commission of India (ECI), the Supreme Court held that VVPAT is "indispensable for free and fair elections" and directed the ECI to equip EVMs with VVPAT systems. The apex court had directed the EC to introduce EVMs in a phased manner for the next General Elections in 2014, saying it would ensure free and fair polls. SC also directed the Centre to provide financial assistance for introducing VVPAT system.

Sources: the hindu.

Paper 2 Topic: *India and its neighbourhood- relations.*

SC to hear Rohingya plea for help

The Supreme Court has agreed to hear an urgent plea made by two Rohingya Muslim immigrants against the government's proposed move to deport their 40,000-strong refugee community back to their native Myanmar, where discrimination and possibly summary executions await them.

Background:

A plea was filed in the supreme court by Rohingyas for protection of the life and liberty of their community. Petitioners say, the Centre's move to deport them violated the constitutional guarantee that the Indian state should "protect the life and liberty of every human being, whether citizen or not."

- As per the petitioners, **"The proposed deportation is contrary to the constitutional protections of Article 14 (equality), Article 21 (right to life) and Article 51(c) (respect for international law and treaty obligations) of the Constitution."**
- Recently, the National Human Rights Commission issued notice to the government on the proposed deportation plan.

Who are the Rohingya?

Few years ago, religious and ethnic tensions between the Rohingya Muslims and the Rakhine Buddhists (who make up the majority of the population in Myanmar) escalated into widespread, deadly rioting. Hundreds of thousands were forced to flee. Since then, ongoing violent attacks have forced even more people to leave their homes.

- The Myanmar Government says that Rohingya people are not Burmese citizens – but the Rohingya have been living in Myanmar for generations. Today, they are a people with no home or citizenship.
- Rohingya people are being widely abused and exploited. They are one of the most persecuted minorities in the world.

Way ahead:

The Myanmar Government should immediately end the violent crackdown on the Rohingya and amend or repeal the 1982 Burma Citizenship Law to provide the Rohingya people with full citizenship in the country. Bangladesh and other governments in Southeast Asia must ensure those fleeing violence and seeking protection, are granted access. Guaranteeing they will not be pushed back or arbitrarily detained and instead that all their rights will be respected.

Sources: the hindu.

China Wants India To Go Slow On Asia-Africa Corridor

China has initiated a move to persuade India to go slow on the **Asia Africa Growth Corridor**, which New Delhi has formulated along with Japan.

- Beijing is now trying to persuade India and South Africa to merge the project with the BRICS platform and keep its rival, Japan, out of it. Once merged into BRICS, India's influence on Africa through the project will also get diluted.

About Asia- Africa Corridor:

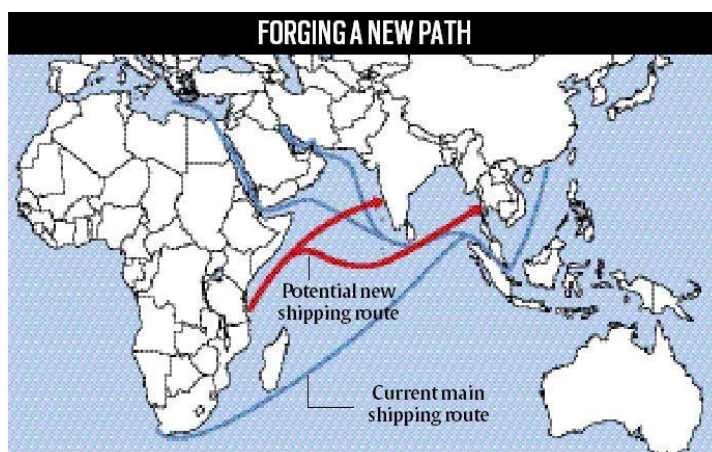
The Asia Africa Growth Corridor project was planned by **India and Japan with the active support of the African Development Bank and several African countries including South Africa who wish to reduce their dependence on Beijing**. The idea is to "create a 'free and open Indo-Pacific region' by rediscovering ancient sea-routes and creating new sea corridors" by integrating the economies of South, Southeast, and East Asia with Oceania and Africa. It primarily **focuses on Development Cooperation Projects, Quality Infrastructure and Institutional Connectivity, Enhancing Skills, and People-to-People Partnership**.

Why is China worried?

It is seen by many as an alternative Silk Road to tap the African market. China sees the move as a source of major competition that will reduce its economic and political influence over the African continent.

What's China doing in this regard?

It is now trying to persuade both India and African countries to merge the initiative with the BRICS agenda so it can have better control over it. China is also pushing the New Development Bank, the Shanghai based financial institution,



which has been created by BRICS countries to expand its lending to different African countries even though they may not be members of the organization.

Sources: et.

Surya Kiran- Joint India-Nepal army exercise

India and Nepal have begun their joint military exercise in Nepal. This is **the 12th edition of Nepal-India joint military exercise**. The exercise – Surya Kiran – is being participated by around 300 troops each side.

- The battalion-level joint training between the two armies will focus on counter-terror operations in mountainous terrain by facilitating interoperability. Disaster management and joint operations for disaster relief will also be a part of the exercise.
- **The 11th edition of the joint exercise was held in Pithoragarh in Uttarakhand.**



About Surya Kiran:

The Surya Kiran series of Exercises are being conducted annually, alternatively in Nepal and India. Notably in the series of military training exercises undertaken by India with various countries, Surya Kiran series with Nepal is the largest in terms of troop's participation.

- **The aim of this exercise is to conduct battalion level joint training** with emphasis on Counter Terrorism in mountainous terrain. Aspects of Disaster Management have also been included in the exercise.
- The Joint Battalion Level Exercise will enhance defence co-operation and relations between the two nations. It is an ideal platform for the contingent of both nations to share their experience and gain mutually. The Exercise will be yet another step towards taking traditional friendship between the two nations to greater heights.

Sources: the hindu.

India refuses to join declaration of international meet against Myanmar

A delegation of Indian MPs, led by Lok Sabha Speaker Sumitra Mahajan, to **the World Parliamentary Forum in Indonesia** has disassociated itself from the adoption of the Bali Declaration as it referred to the violence in the Rakhine state of Myanmar and emphasised that any mention of country-specific issues was not appropriate.

Bali declaration:

The Bali Declaration, adopted at the World Parliamentary Forum on Sustainable Development in Indonesia, **called on all parties to contribute to restoring stability and security in the region**. It urged everyone to “exercise maximum self-restraint from using violent means, respect the human rights of all people in Rakhine state regardless of their faith and ethnicity, as well as facilitate and guarantee safe access for humanitarian assistance”.

Why India refused to sign the declaration?

- India has maintained that the Bali Declaration was **not in line with the agreed principles of sustainable development**. India also maintained that it continues to support achievement of Sustainable Development Goals (SDGs), the Forum's mandate was to discuss global issues and the overarching principles relating to SDGs.
- India argued **that specifying a particular country is unjustified** as this Forum is focused on SDGs and inclusive development for all countries based on cooperative and collaborative approach to achieve the 2030 Agenda for the world.

India's stand:

India has reiterated its stance that the purpose of convening the Parliamentary Forum is to arrive at mutual consensus for implementation of SDGs which requires inclusive and broad-based development processes. The proposed reference to the violence in Rakhine state in the Declaration was considered as not consensus-based and inappropriate.

Sources: et.

Chennai-Vladivostok sea route to make it near East

Aiming to put in place a key maritime route connecting India with Northeast Asia and Western Pacific region Delhi is contemplating to put in **place a major connectivity initiative — direct shipping link between Chennai and Vladivostok** amid China's ambitious Maritime Silk Route (MSR) connecting Asia with Africa.

Key facts:

- This proposed maritime route which could be transformed into a corridor could juxtapose with Indo-Japan Pacific to Indian Ocean Corridor amid Beijing's OBOR of which MSR is a part – virtually connecting entire SE Asia through road, shipping and rail links.
- This shipping link would enable to transfer cargo between Chennai and Vladivostok in 24 days in comparison to over 40 days currently taken to transport goods from India to Far East Russia via Europe, according to experts on the subject.

Background:

India was the first country to establish a resident Consulate in Vladivostok in 1992. Current engagement of India with the region is limited to isolated pockets such as the Irkut Corporation in Irkutsk where the Mig and Sukhoi aircraft are built and over USD 6 billion worth of investments by ONGC Videsh Limited in the Sakhalin 1 project.

- The region has a wealth of natural resources such as land, timber, mineral and other resources like tin, gold, diamonds and oil and natural gas. The Russian government has announced several initiatives to attract investments in the region, including an agricultural SEZ, the Vladivostok Free Port Project and also invites participation in the timber industry, mining of the huge mineral resources (coal & diamonds) and precious metal deposits (gold, platinum, tin and tungsten).
- Opportunities for collaboration for Indian companies include in such sectors as agriculture, mining, port development and infrastructure, diamond processing, agro-processing.

Sources: et.

Humanitarian Assistance to Bangladesh on Account of Influx of Refugees

Operation Insaaniyat has been launched by the government of India to assist Bangladesh in managing crisis caused due to heavy influx of refugees from neighbouring Bangladesh.

Key facts:

As part of this programme, the Indian government is sending relief material. The Indian Air Force has been tasked to airlift the relief material from India to Bangladesh. This aircraft will be loaded with relief material consisting of critical daily necessities viz., rice, pulses, sugar, salt, cooking oil, ready to eat meals, mosquito nets etc.

Background:

The first Indian consignment comes days after Bangladesh High Commissioner in New Delhi Syed Muazzem Ali met Foreign Secretary S Jaishankar last week and briefed him about the problems faced by Dhaka due to the influx of the refugees.

The crisis:

Rohingya residents – a stateless mostly Muslim minority in a Buddhist-majority nation – allege that the military and Rakhine Buddhists responded with a brutal campaign against them. According to the UN estimates, over 379,000 Rohingya Muslims have fled Myanmar's Rakhine state into Bangladesh since August 25.

Sources: pib.

India Signs Deal with JICA to Upgrade Alang-Sosiya Shipyards

The Government of India has signed a loan deal worth \$76 million with Japan International Cooperation Agency (JICA), for a project to upgrade the environment management plan at Alang-Sosiya ship recycling yards.

Key facts:

- The total cost of the project will be \$ 111 million, out of which \$76 million will be provided as soft loan from JICA.

- Out of the remaining amount, \$25 million as taxes and fees will be borne by Government of Gujarat and the balance \$10 million will be shared by Ministry of Shipping & Government of Gujarat.
- The project will be executed by Gujarat Maritime Board (GMB) and is likely to be completed by 2022.

Benefits of this project:

- This project will help the Alang-Sosia ship-recycling yards to comply with international safety & environmental regulations.
- This will attract more business at the recycling facilities at Alang, thereby further consolidating India's share in the global ship-recycling industry.
- This project will also help in safeguarding the marine and coastal environment. The use of advanced decontamination technology will rule out the possibility of fire accidents in oil and chemical tankers, thereby ensuring workers safety.
- The project is expected to result in increase in direct employment from 50,000 to 92,000 people and in-direct employment from 1.5 lakhs to 3 lakh people.

Sources: pib.

'BIMSTEC Disaster Management Exercise- 2017'

The First 'BIMSTEC Disaster Management Exercise- 2017' (BIMSTEC DMEx-2017) will be conducted by the National Disaster Response Force (NDRF) as the lead agency from October 10-13, 2017 in Delhi and the National Capital Region (NCR). This Exercise will be a platform for sharing Best Practices on all aspects of Disaster Risk Reduction (DRR), strengthening regional response and coordination for Disaster Management among the BIMSTEC member countries.

Key facts:

- Delegates from all seven nations of the 'Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation' (BIMSTEC) grouping, – namely Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand, representatives from Embassies/High Commissions of BIMSTEC nations in Delhi, National Disaster Management Authority (NDMA), and Senior Officers from the Nodal Ministries are participating in the event.
- The main focus of the BIMSTEC DMEx-2017 will be on testing the region's preparedness and resilience towards effective activation of inter-Governmental interaction/dialogue/agreements for immediate deployment of regional resources for disaster response.
- It will help create synergy and synchronize efforts to institutionalize regional cooperation among the member countries. The exercise will help strengthen the effective utilization of the Search & Rescue Teams for Disaster Relief & Emergency Response, including Emergency Rapid Assessment Teams and Management of mass casualties especially in situations involving breakdown of infrastructure and communication.

Background:

The BIMSTEC region is home to around 1.5 billion people, constituting around 22% of the global population with a combined GDP of US \$2.7 trillion economy. Majority of the BIMSTEC countries are situated in the South Asian Region (SAR), prone to natural disasters such as floods, cyclones, earthquakes, avalanches and drought.

Sources: pib.

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

India-European FTA talks this month

India and the European Free Trade Association (EFTA) are planning to shortly conclude their long pending negotiations on FTA. So far, 16 rounds of negotiations have taken place, talks for which started in 2008.

Key facts:

- The proposed agreement covers trade in goods and services, investments, trade facilitation, Customs cooperation, protection of intellectual property and public procurement.

- Under an FTA, trading partners give market access to each other with a view to promoting bilateral trade in goods and services, besides investments.
- India is negotiating similar pacts with several other countries, including Australia, New Zealand, Israel and Canada. It has implemented FTAs with Singapore, South Korea, Japan and Asean, among others.

Background:

The two-way trade between the regions dropped to USD 19 billion in 2016-17, from USD 21.5 billion in 2015-16. The trade gap is highly in favour of the EFTA group.

What is EFTA?

The European Free Trade Association (EFTA) is **an intergovernmental organisation, established in 1960 by the EFTA Convention for the promotion of free trade and economic integration between its Member States (today Iceland, Liechtenstein, Norway and Switzerland)**, within Europe and globally.

- The organisation operates in parallel with the European Union (EU), and all four member states participate in the European single market.
- EFTA does not envisage political integration. It does not issue legislation, nor does it establish a customs union.

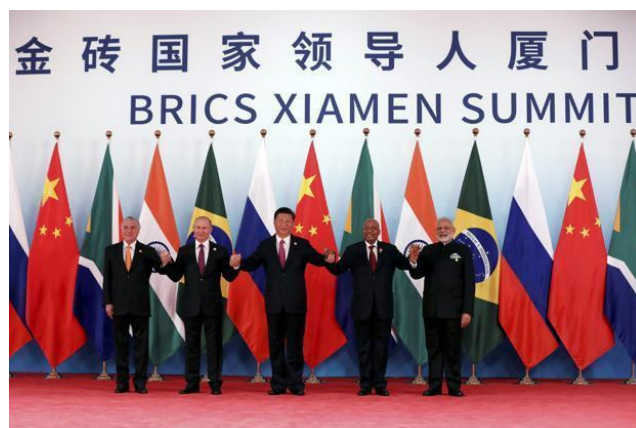
Sources: the hindu.

BRICS Leaders' Xiamen Declaration

9th BRICS summit was recently held in Xiamen, China. This is **the second time the China has hosted the summit after the 2011 summit**. At the end of the summit, **Xiamen declaration** was adopted by the leaders of the five countries.

Highlights of the Xiamen declaration:

- BRICS countries will strive **towards broad partnerships with emerging markets and developing countries**, and pursue equal-footed and flexible practices and initiatives for dialogue and cooperation with non-BRICS countries, including **through BRICS Plus cooperation**.
- BRICS countries have resolved **to promote the development of BRICS local currency bond markets and to jointly establish a BRICS local currency bond fund** and also to facilitate financial market integration.
- They will also encourage explorations toward **the establishment of the BRICS Institute of Future Networks**. Besides, partner countries will enhance joint BRICS research, development and innovation in information and communications technology, including the internet of things, cloud computing, big data, data analytics, nanotechnology, artificial intelligence, 5G and their innovative applications.
- They have also committed to strengthen BRICS **cooperation on energy** and work to foster open, flexible and transparent markets for energy commodities and technologies.
- **BRICS Agriculture Research Platform** is proposed to be established in India.
- They also called upon the international community to establish **a genuinely broad counterterrorism coalition** and support the UN's central coordinating role in this regard.
- **Importance of people-to-people exchanges** in promoting development and enhancing mutual understanding, friendship and cooperation among BRICS peoples was also emphasized.
- Countries also resolved to work together **to promote most effective use of fossil fuels and wider use of gas, hydro and nuclear power**, which will contribute to the move towards a low emission economy, better energy access and sustainable development.



Sources: pib.

India-Japan sign open sky agreement, fares may come down

India and Japan have agreed to an open sky arrangement under which the airlines of both countries can operate an unlimited number of flights. The agreement was signed after talks between Prime Minister Narendra Modi and Japan PM Shinzo Abe.

- The agreement will not only encourage connectivity and passenger travel between the two countries, but will also result in reduction in airfares on these routes.

Open sky agreement:

The agreement was signed in accordance with the **National Civil Aviation Policy (NACP)**, 2016. The NACP permits the government to enter into an *'open sky' air services agreement on a reciprocal basis with SAARC nations as well as countries with territory located entirely beyond a 5,000 kilometre radius from New Delhi.*

Last year, India signed an open sky agreement with Greece, Jamaica, Guyana, Czech Republic, Finland, Spain and Sri Lanka. India also signed a bilateral open sky agreement with the US in 2005. In 2003, India had signed an open sky agreement with the 10-member Association of South East Asian Nations (ASEAN).

Sources: the hindu.

Japan teams up with India for Northeast

A memorandum of understanding to set up **India Japan Act East Forum** with an aim *to marry India's Act East Policy with Japan's Free and Open Asia-Pacific strategy* in the backdrop of China's One Belt One Road initiative is among the major agreements signed during Japanese Prime Minister Shinzo Abe's visit to India for the 12th Indo-Japan annual summit.

- The forum will enhance connectivity and promote developmental projects in India's Northeast region in an efficient and effective manner.

Japan's investments in the North East:

Japan has cooperated with a variety of development projects in the Northeast, ranging from connectivity infrastructure such as roads and electricity, water supply and sewage, to forest resource management and biodiversity.

Recently, India and Japan signed a document on Japanese loan and aid for highway development in the Northeast that can complement India's connectivity initiatives in Bangladesh, Myanmar and beyond. Japan will extend a loan of Rs 2,239 crore to India for **'North East Road Network Connectivity Improvement Project'** to improve the National Highway 40 (NH-40) and construct a bypass on NH-54 in the Northeast. The project is expected to contribute to the improvement of the intra-regional and international connectivity through regional economic development.

Background:

Japan has a historic connection to the Northeast and is among the few countries that India has allowed a presence in the eight landlocked states which are the country's gateway to the Association of Southeast Asian Nations members. India and Japan agree that improving connectivity between Asia and Africa is vital for achieving prosperity of the entire region.

Opposition from China:

China has opposed any foreign investments in India's North East, or the involvement of third-parties in resolving its border dispute with India. It has clearly opposed the involvement of any third party in the region in whatsoever form.

Sources: et.



INDO-USA Joint Exercise Yudh Abhyas – 2017

Exercise Yudh Abhyas – 2017, a joint military exercise between Indian and US armies has commenced at Joint Base Lewis McChord, Washington, USA.

Key facts:

- During the two week long exercise soldiers from both countries will hone their tactical skills in counter insurgency and counter terrorist operations under a joint brigade headquarter.
- Both sides will jointly train, plan and execute a series of well-developed tactical drills for neutralization of likely threats that may be encountered in UN peace keeping operations.
- Experts from both sides will hold detailed discussions to share their experience and expertise on varied operational topics.

Sources: pib.

Centre rethinks joining Hague child custody pact

An “inter-ministerial process” is under way to discuss the repercussions of **the Hague convention** on India. The government had in November 2016 announced that it would not sign the convention.

- The Ministry of Women and Child Development has reservations about the treaty because they believe it could trample on women’s rights.
- However, America says India should sign this convention to create a more effective response to deal with abduction cases and prevent **inter-country parental child abduction**.

What is Inter-country parental child abduction?

Inter-country parental child abduction is a situation that is attained when one parent takes a child or children to a foreign country to prevent the other parent from seeking custody of the child.

Indian scenario:

India’s case-load (regarding IPCA) is second largest in the United States which is followed by Mexico. At least 90 children from 80 Indian-American families were affected by separating parents and the legal problems involved. As more and more Indians are studying and working in the U.S, such cases are growing in number and it is necessary to get a better mechanism to deal with this.

Background:

Currently, there is no specific Indian legislation addressing issues related to abduction of children from and into India. However, Law Commission of India had submitted the 218th Report titled “Need to accede to the Hague Convention on the Civil Aspects of International Child Abduction 1980” on 30th March, 2009.

About Hague Abduction Convention:

The Hague Convention on the Civil Aspects of International Child Abduction or Hague Abduction Convention is a multilateral treaty developed by the Hague Conference on Private International Law (HCCH) that provides an expeditious method to return a child internationally abducted by a parent from one member country to another.

- The Convention entered into force between the signatories on 1 December 1983.
- The Convention was drafted to ensure the prompt return of children who have been abducted from their country of habitual residence or wrongfully retained in a contracting state not their country of habitual residence.
- The primary intention of the Convention is to preserve whatever status quo child custody arrangement existed immediately before an alleged wrongful removal or retention thereby deterring a parent from crossing international boundaries in search of a more sympathetic court.
- The Convention applies only to children under the age of 16.

Sources: the hindu.

50 nations ink UN nuclear ban treaty opposed by big powers

Fifty countries recently signed a treaty to ban nuclear weapons, a pact that the world's nuclear powers spurned but supporters hailed as a historic agreement nonetheless.

Background:

In July 2017, the United Nations adopted the Treaty on the Prohibition of Nuclear Weapons, which bans and makes it illegal to possess, use, produce, transfer, acquire, stockpile or deploy nuclear weapons. This was the culmination of 10 years of preparation by many national and international organizations. It was signed and approved by 122 of the 123 participant nations, representing two-thirds of the nations in the UN. Interestingly, none of the nuclear weapons nations participated.

About the treaty:

The treaty prohibits a full range of nuclear-weapon related activities, such as undertaking to develop, test, produce, manufacture, acquire, possess or stockpile nuclear weapons or other nuclear explosive devices, as well as the use or threat of use of these weapons.

- Under its terms, non-nuclear nations agreed not to pursue nukes in exchange for a commitment by the five original nuclear powers the U.S., Russia, Britain, France and China to move toward nuclear disarmament and to guarantee other states' access to peaceful nuclear technology for producing energy.
- This is the most significant multilateral development on nuclear arms control since the adoption of the Nuclear Non-Proliferation Treaty (NPT) in 1968. It has to be ratified by 50 countries to come into force.

Why is it being opposed?

Nuclear powers argue their arsenals serve as a deterrent against a nuclear attack and say they remain committed to the nuclear Non-Proliferation Treaty (NPT). They said a purported ban on nuclear weapons that does not address the security concerns which continue to make nuclear deterrence necessary cannot result in the elimination of a single nuclear weapon and will not enhance any country's security, nor international peace and security.

What supporters say?

Supporters of the treaty argue that new treaty will close a "legal gap" that exists regarding nuclear weapons, which are not expressly outlawed by the NPT even though their use would be contrary to the rules of international law applicable in armed conflict. They argue that the CPNW initiative reinforces the NPT and the requirement in Article VI for nuclear disarmament and that it can reduce the salience nuclear weapons and help prompt more urgent action to reduce nuclear risk and promote disarmament.

Sources: the hindu.

India, Russia to hold joint military exercise in October

In the midst of evolving security situation in the region, India and Russia will hold a mega military exercise- **Indra**- in October involving their armies, navies and the air forces for the first time to further ramp up military ties.

Key facts:

- The Russian army, navy and air force are holding bilateral exercises separately but this is for the **first time, both the countries will carry out a tri-services exercise**. The exercise "Indra" will primarily focus on achieving coordination between forces of the two countries in a tri- services integrated theatre command scenario.
- It will be for the first time that India will participate in a tri-services military exercise with a foreign country with such a large scale participation by the Navy, the Army and the Air Force (IAF).
- A total of 350 Indian Army personnel will participate in the mega exercise and the contingent will be led by a major- general rank official. The contingents by the Navy and the Indian Air Force will also be sizeable in numbers.
- The military exercise is taking place at a time when India's ties with China have nose-dived due to the simmering border dispute and its ties with Pakistan have deteriorated over cross-border terrorism and a number of other issues.

Way ahead:

Russia has been a long-standing defence partner of India and both the countries are now eyeing to further deepen the ties. Both countries had decided to “upgrade and intensify” defence cooperation through joint manufacture, co-production and co-development of key military hardware and equipment.

Sources: et.

Govt to strengthen ‘Korea Plus’ cell to strengthen FDI from S.Korea

The government is planning to facilitate greater investments from South Korea and would strengthen the ‘Korea Plus’ cell in this regard.

About Korea Plus:

“Korea Plus” is a strategic initiative between the Governments of India and South Korea “to promote, facilitate and retain Korean investments in India.”

Details:

- The mandate of Korea Plus covers the entire investment spectrum including supporting Korean enterprises entering the Indian market for the first time, looking into issues faced by Korean companies doing business in India and policy advocacy to the Indian government on their behalf.
- Korea Plus will act as a mediator in arranging meetings, assisting in public relations and research, evaluation and provide information and counselling in regard to Korean companies’ investing in India.

Composition:

Korea Plus comprises of a representative each from the Korean ministry of industry, trade and energy, Korea Trade Investment and Promotion Agency as well as three representatives from Invest India — the national investment promotion and facilitation agency of India.

Sources: the hindu.

International Solar Alliance

Fiji, Niger and Tuvalu have deposited instrument of ratification of the Framework Agreement of the International Solar Alliance (ISA) in the recently held 5th meeting of International Steering Committee (ISC) of the ISA.

- Till date 40 countries have signed and 11 countries have ratified the Framework Agreement of the ISA. With ratifications by 15 countries, the ISA will become a treaty based inter-governmental international organization.

About International Solar Alliance (ISA):

The ISA is an Indian initiative jointly launched by the Prime Minister of India and the President of France on 30 November 2015 at Paris, on the sidelines of COP-21.

- **Aim:** It aims at addressing obstacles to deployment at scale of solar energy through better harmonization and aggregation of demand from solar rich countries lying fully or partially between the Tropic of Cancer and Tropic of Capricorn.
- India has offered a contribution of Rs 175 crore for creating ISA corpus fund and for meeting the cost of ISA secretariat for initial five years.
- International Steering Committee was establishment under the mandate of the Paris Declaration of ISA to provide the guidance and direction to establish the ISA.

Sources: pib.

Inter-bank Local Currency Credit Line Agreement and Cooperation Memorandum relating to Credit Ratings

The Union Cabinet has given its approval to the signing of the (i) **Interbank Local Currency Credit Line Agreement** and (ii) **Cooperation Memorandum Relating to Credit Ratings by Exim Bank** with participating member banks under BRICS Interbank Cooperation Mechanism.

- As both the Agreement and the MoU are umbrella pacts, and are non-binding in nature, the Board of Directors of Exim Bank has been authorized to negotiate and conclude any individual contracts and commitments within their framework.

Impact:

- The Agreements will promote multilateral interaction within the area of mutual interest which will deepen political and economic relations with BRICS nations.
- Signing of the Agreement will position Exim Bank in the international platform along with large development finance institutions, like CDS, VEB and BNDES.
- At an appropriate time, Exim Bank, leveraging this umbrella agreement, could enter into bilateral agreement with any of these member institutions to raise resources for its business.
- As and when an opportunity arises for co-financing in commercial terms, by any two member institutions (say India and South Africa), lending in single currency by both the institutions would also be possible.

Background:

Exim Bank finances, facilitates and promotes India's international trade. It provides competitive finance at various stages of the business cycle covering import of technology, export product development, export production and export credit at pre-shipment and post-shipment stages and investments overseas.

Interbank Local Currency Credit Line Agreement:

The initial Master Agreement on Extending Credit Facility in Local Currency under the BRICS Interbank Cooperation Mechanism had a validity of five years, which has expired in March 2017. It is understood that some of the member banks (like CDB and VEB; CDB and BNDES) have entered into bilateral agreements for local currency financing under the Master Agreement signed in 2012. Although the current conditions are not conducive to usage, it was useful to keep the same alive as an enabling feature in case a suitable opportunity materializes in future. Exim Bank raises resources in the off-shore market in diverse currencies and swaps to mitigate the risk. The umbrella Agreement would serve as an enabler to enter into bilateral agreements with member banks subject to national laws, regulations and internal policies of the signatories.

Cooperation Memorandum Relating to Credit Ratings:

It would enable sharing of credit ratings amongst the BRICS member banks, based on the request received from another bank. This would be an ideal mechanism to mitigate the credit risks associated with cross-border financing. In future, such a mechanism could also serve as pre-cursor to the proposal of having an alternate rating agency by BRICS nations.

Sources: pib.

India signs MoU to train Afghan police

India and Afghanistan have exchanged a memorandum of understanding, which will see Afghan police forces trained in India for the first time.

Aim of the MoU: The MoU on Technical Cooperation on Police Training and Development will see India expand its capacity building of Afghan troops to include policemen and security forces, who are facing the brunt of Taliban attacks in the country, under a UN Development Programme project.

Background:

India has earlier trained Afghan national army officers and the MoU for training Afghan police is expected to further deepen security cooperation between the two countries. According to the government, the MoU will help in capacity building of Afghanistan National Police and improving the security apparatus in the region.

India has been helping trouble-torn Afghanistan in capacity building besides extending assistance in social, medical and educational fields.

Sources: the hindu.

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

India to flag worry on pace of services talks at RCEP

At the forthcoming ministerial-level meeting on the proposed Free Trade Agreement (FTA) involving 16 Asia-Pacific nations, India has decided to raise concerns regarding the 'slow' pace of negotiations on services trade liberalisation as opposed to 'higher priority' being accorded to commitments to open up goods trade in the region.

India's concerns:

India is upset that other RCEP nations seem to be focused more on "extracting as much (binding commitments) as possible on eliminating tariffs to open up goods trade", instead of sticking to the RCEP 'Guiding Principles and Objectives' which state that the "negotiations on trade in goods, trade in services, investment and other areas will be conducted in parallel to ensure a comprehensive and balanced outcome."

What you need to know about RCEP?

RCEP is between the ten member states of the Association of Southeast Asian Nations (ASEAN) (Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam) and the six states with which ASEAN has existing FTAs (Australia, China, India, Japan, South Korea and New Zealand).

- RCEP negotiations were formally launched in November 2012 at the ASEAN Summit in Cambodia.

Way ahead:

India has decided to talk tough and state that any more discussions on opening up goods trade will be only after ensuring that negotiations on services trade liberalisation "catch up" with talks on goods trade. India is keen that in return for agreeing to open up goods trade (where most RCEP nations have an advantage), other member nations must commit to substantial liberalisation of services trade – including on easing norms on movement of professionals and skilled workers across borders for short-term work.

Sources: the hindu.

US resumes premium processing of H-1B visas

The US has resumed fast processing of H-1B work visas in all categories subject to Congress-mandated limit, five months after it was suspended temporarily to handle the huge rush of applications for the work visas popular among Indian IT professionals.

Background:

Premium processing of H-1B visa was suspended in April to handle huge rush of new petitions.

What is H-1B visa?

The H-1B visa is a non-immigrant visa that allows US companies to employ foreign workers in speciality occupations that require theoretical or technical expertise. The technology companies depend on it to hire tens of thousands of employees each year.

Why is H1B visa programme criticised?

The aim of the H1B visa programme was to supplement the US workforce with high-skilled workers to do jobs that Americans are not skilled to do, not to replace the US workers. But over time, there have been many grumblings that many companies use the H1B visa to replace American workers with foreign ones, as the latter can be hired at lower salaries without compromising on the skill sets. In some cases, American employees have alleged that they were made to train H1B holders to do their own jobs, and then fired.

Sources: the hindu.

Paper 2 Topic: Important International institutions, agencies and fora, their structure, mandate.

5 banks of BRICS nations sign pact for credit lines

Five banks of the BRICS Bank Cooperation Mechanism have agreed to establish credit lines in the national currencies and cooperate on credit ratings.

- Brazilian Development Bank (BNDES), Vnesheconombank, Export-Import Bank of India, China Development Bank and Development Bank of South Africa (DBSA) have signed an agreement to establish credit lines in the national currencies, as well as a memorandum of cooperation on credit ratings.

Key facts:

- The agreement on credit ratings allows the ICM members to share information about internal credit ratings assigned to clients, as well as rating assessment and assignment methodologies.
- The use of local currencies will help promote mutually beneficial economic cooperation, mitigate currency risks, increase trade, and facilitate companies in accessing the BRICS markets.

The BRICS interbank cooperation mechanism:

In order to develop and strengthen economic ties and investment cooperation between BRICS countries, in 2010 state financial institutions for development and export support of the BRICS nations entered into a Memorandum on cooperation, thus creating the BRICS interbank cooperation mechanism.

- One of the main purposes of cooperation is to set up a scheme designed to provide financing and banking services for future investment projects that could be beneficial for the economic development of the BRICS countries.
- On the basis of agreements that have been signed within the framework of the BRICS interbank cooperation mechanism, the member banks have taken steps towards developing multilateral financial cooperation within the BRICS countries and created basic mechanisms for settling payments and financing investment projects in local currencies.

Sources: the hindu.

Up to 18,000 Rohingya fled Myanmar violence last week: International Organisation for Migration

As per data released recently by **the International Organization for Migration (IOM)**, about 18,000 Rohingya Muslims are estimated to have crossed into Bangladesh in the last week seeking to escape the worst violence in Myanmar's northwest in at least five years.

- The IOM said it was difficult to estimate the number of people stranded in the no man's land at the border between the neighbours, but added there were "hundreds and hundreds" of people stuck there.

Background:

A series of coordinated attacks by Rohingya insurgents on security forces in the north of Myanmar's Rakhine state recently and ensuing clashes triggered the exodus, while the government evacuated thousands of Rakhine Buddhists. The United Nations, while condemning the attacks, pressured Myanmar to protect civilian lives without discrimination and appealed to Bangladesh to let those fleeing the military counteroffensive through.

Who are rohingyas?

The Rohingya are denied citizenship in Myanmar and regarded as illegal immigrants, despite claiming roots there that go back centuries.

All you need to know about the International Organization for Migration:

Established in 1951, IOM is the leading **inter-governmental organization in the field of migration** and works closely with governmental, intergovernmental and non-governmental partners.

- With 166 member states, a further 8 states holding observer status and offices in over 100 countries, IOM is dedicated to promoting humane and orderly migration for the benefit of all. It does so by providing services and advice to governments and migrants.

- IOM works to help ensure the orderly and humane management of migration, to promote international cooperation on migration issues, to assist in the search for practical solutions to migration problems and to provide humanitarian assistance to migrants in need, including refugees and internally displaced people.

IOM works in the four broad areas of migration management:

- Migration and development.
- Facilitating migration.
- Regulating migration.
- Forced migration.

Sources: the hindu.

UN Security Council Unanimously Steps Up Sanctions Against North Korea

The United Nations Security Council unanimously stepped up sanctions against North Korea on Monday over the country's sixth and most powerful nuclear test on Sept. 3, imposing a ban on the country's textile exports and capping imports of crude oil.

- It was the ninth sanctions resolution unanimously adopted by the 15-member council since 2006 over North Korea's ballistic missile and nuclear programs.

The new sanctions include:

- Limits on imports of crude oil and oil products. China, Pyongyang's main economic ally, supplies most of North Korea's crude oil.
- A ban on exports of textiles, which is Pyongyang's second-biggest export worth more than \$700m (£530m) a year.
- Measures to limit North Koreans from working overseas, which the US estimates would cut off \$500m of tax revenue per year.

Background:

Pyongyang has staged a series of missile tests in recent months that appeared to bring much of the US mainland into range. It followed up with a sixth nuclear test on September 3, its largest to date, which it said was a miniaturized hydrogen bomb.

The United States and its allies argue that tougher sanctions will pile pressure on Kim's regime to come to the negotiation table to discuss an end to its nuclear and missile tests. Russia and China are pushing for talks with North Korea, but their proposal for a freeze on Pyongyang's missile and nuclear tests in exchange for suspending US-South Korean military drills has been rejected by the United States.

About the UNSC:

The United Nations Security Council (UNSC) is one of the six principal organs of the United Nations and is charged with the maintenance of international peace and security. Its powers include the establishment of peacekeeping operations, the establishment of international sanctions, and the authorization of military action through Security Council resolutions; it is the only UN body with the authority to issue binding resolutions to member states.

- The Security Council **has 15 members**, including five permanent. The five permanent members, each with the power of veto, are China, France, Russia, the United Kingdom and the United States.
- The **Council's 10 non-permanent seats are allocated according to a rotation pattern set by the Assembly in 1963**, to ensure a proportionate representation over time from the different parts of the world: five from African and Asian States; one from Eastern Europe; two from Latin American States; and two from Western European and Other States.
- The Security Council is also responsible for determining the existence of a threat against peace and to respond to an act of aggression. It is also responsible for finding peaceful means to settle a conflict or a dispute between States.
- In some cases, the Council can resort to sanctions or even authorize the use of force to maintain or restore international peace and security.

Sources: the hindu.

ADB plans to raise lending up to \$4 billion to India

The Asian Development Bank (ADB) has decided to raise its annual lending to India to a maximum of \$4 billion to support the country to accelerate inclusive economic transformation toward upper middle-income status, as laid out in a new ADB country partnership strategy (CPS) for 2018-2022 endorsed recently.

Key facts:

- ADB's programme in India will focus on three main pillars of activity during the 5-year period — boosting economic competitiveness to create more and well-paid jobs, improved access to infrastructure and services, and addressing climate change and improving climate resilience.
- The planned lending level, which includes private sector operations, compares with an average of \$2.65 billion a year in loans extended in the period 2012-2016.
- Financing will also go for public sector management, agriculture, natural resources and rural development as well as skills development and urban health, the statement said.
- The new lending will be complemented by technical assistance to undertake strategic studies, build capacities and prepare projects.
- ADB said it will also explore co-financing opportunities, including climate funds for relevant projects.

About ADB:

It is a regional development bank established on 22 August 1966 and is headquartered in Philippines. It aims to facilitate economic development of countries in Asia. It also aims for an Asia and Pacific free from poverty.

Membership:

The bank admits the members of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP, formerly known as the United Nations Economic Commission for Asia and the Far East) and non-regional developed countries.

Currently, it has 67 members – of which 48 are from within Asia and the Pacific and 19 outside.

Voting:

ADB was modelled closely on the World Bank, and has **a similar weighted voting system where votes are distributed in proportion with member's capital subscriptions.**

Funding:

- ADB raises funds through bond issues on the world's capital markets.
- ADB also rely on its members' contributions, retained earnings from its lending operations, and the repayment of loans.
- Japan holds the largest proportions of shares at 15.67%. The United States holds 15.56%, China holds 6.47%, India holds 6.36%, and Australia holds 5.81%.

Board of Governors:

- It is the highest policy-making body of the bank.
- It is composed of one representative from each member state.
- The Board of Governors also elect the bank's President who is the chairperson of the Board of Directors and manages ADB.
- The Alternate Board of Governors are nominated by Board of Governors of ADB's 67 to represent them at the Annual Meeting that meets formally once year to be held in a member country.

Loans:

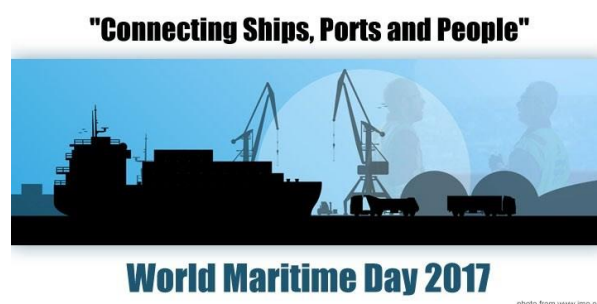
It offers both Hard Loans and Soft loans. The ADB offers "hard" loans from ordinary capital resources (OCR) on commercial terms, and the Asian Development Fund (ADF) affiliated with the ADB extends "soft" loans from special fund resources with concessional conditions.

Sources: the hindu.

World Maritime Day 2017

The World Maritime Day was formally celebrated by the International Maritime Organisation (IMO) on 28 September 2017.

- World Maritime Day is an official United Nations day. Every year, it provides an opportunity to focus attention on the importance of shipping and other maritime activities and to emphasize a particular aspect of IMO's work.
- This day also serves as a reminder to all and sundry that a vibrant and sustainable blue economy is a boon to all mankind.



Theme: "Connecting Ships, Ports and People" is the theme of World Maritime Day this year. This theme was chosen by the IMO to provide an opportunity to focus on the many diverse sectors and people involved in the shipping and logistics areas.

About IMO:

The IMO is **the United Nations specialised agency** with responsibility for the safety and security of shipping and the prevention of marine pollution by ships.

- It has 171 Member States and three Associate Members.
- The IMO's primary purpose is to develop and maintain a comprehensive regulatory framework for shipping and its remit today includes safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping.
- IMO is governed by an assembly of members and is financially administered by a council of members elected from the assembly.
- The IMO's structure comprises the Assembly, the Council, the Maritime Safety Committee, the Marine Environment Protection Committee, the Legal Committee, the Technical Cooperation Committee, and the secretariat, headed by a Secretary-General.

Sources: the hindu.

GS PAPER - III

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

BUSINESS & CLIMATE SUMMIT 2017

BUSINESS & CLIMATE SUMMIT 2017 is being held in New Delhi. **Federation of Indian Chambers of Commerce and Industry (FICCI) is organizing the third edition of BCS.**

About BUSINESS & CLIMATE SUMMIT 2017:

The Business & Climate Summit is the leading **annual forum for businesses, investors and policymakers on climate action**. It is where business and governments come together to agree on a roadmap for reaching net zero emissions over the next half century.

- It demonstrates how low carbon strategies are good for business and good for growth – and builds the partnerships needed to scale up and accelerate the low carbon transition.
- The underlying theme of BCS is that **the businesses hold the key to meeting global carbon reduction targets; and collaboration between business and government is critical to success.**
- The Business & Climate Summit would be attended by Ministers, Senior Government Officials, Business Leaders, International Agencies, Banks & Financial Institutions, Senior Business Executives and Media from different parts of the world.

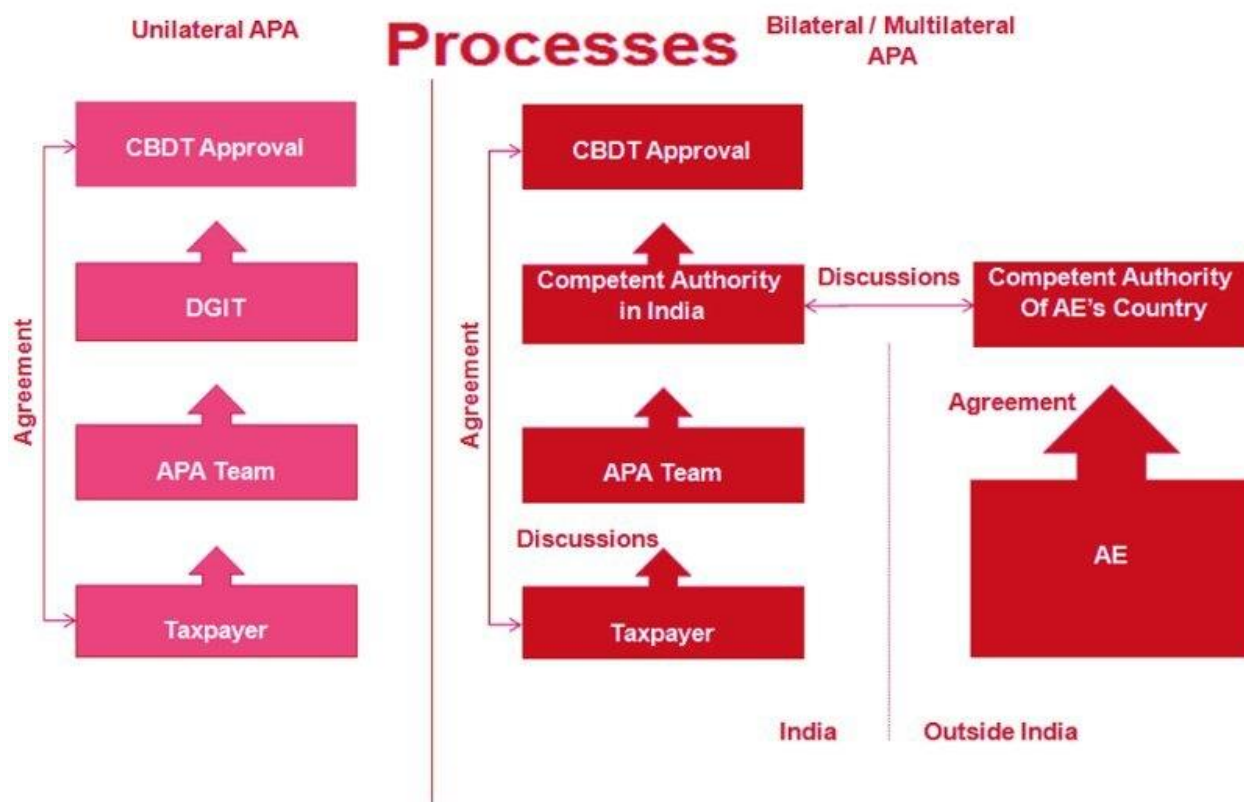
BCS 2017 – Objectives:

- Express business belief that accelerated reduction in GHG emissions to limit global warming to +2°C maximum is compatible with the pursuit of human, social and economic development, and their commitment to engage in this direction.
- Increase awareness of international policy makers about the wealth of solutions developed by companies and the conditions for deployment of these solutions.
- Debate and present the priority policies required to allow the accelerated deployment of these solutions in the world and ensure that climate change is taken into account in all policy decisions
- Showcase business leadership in addressing climate change, highlight how businesses can provide solutions to help governments achieve climate change objectives.

Sources: pib.

Advance Pricing Agreements (APAs)

Advance Pricing Agreement



The Central Board of Direct Taxes (CBDT) has entered into 4 more Advance Pricing Agreements (APAs) during August, 2017. Out of these 4 Agreements, 3 are Unilateral and 1 is a Bilateral.

- With the signing of these 4 Agreements, the total number of APAs entered into by CBDT has reached 175. This includes 162 Unilateral APAs and 13 Bilateral APAs. In the current financial year, a total of 23 APAs (2 Bilateral and 21 Unilateral) have been signed till date.
- The 4 APAs entered into during August, 2017 pertain to various sectors of the economy like Telecom, Banking, Manufacturing and Education.

What are APAs?

The APA provisions were introduced in the Income-tax Act in 2012 and the "Rollback" provisions were introduced in 2014. The APA scheme endeavours **to provide certainty to taxpayers in the domain of transfer pricing by specifying the methods of pricing and setting the prices of international transactions in advance**. Since its inception, the APA scheme has been well-accepted by taxpayers and that has resulted in more than 800 applications (both Unilateral and Bilateral) being filed so far in five years.

The progress of the APA scheme strengthens the Government's resolve of fostering a non-adversarial tax regime. The Indian APA programme has been appreciated nationally and internationally for being able to address complex transfer pricing issues in a fair and transparent manner.

Sources: pib.

Task Force on Employment and Exports and its Terms of Reference

In a bid to provide a "major" thrust to job creation by enhancing India's exports, the NITI Aayog has set up a task force to be headed by its Vice-Chairman Rajiv Kumar. The task force, which includes government and private sector representatives, will submit its report by November.

The steps outlined by the taskforce to address this challenge of creating well-paid, formal sector jobs, include:

- Proposing a comprehensive plan of action to generate employment and alleviate under-employment in both goods and services sectors and low wages by boosting India's exports in key labour-intensive industries
- Recommending sector-specific policy interventions in key employment sectors
- Recommending measures to enhance trade in services with high employment potential
- Identifying key macroeconomic factors constraining exports and suggesting methods to address these constraints
- Assessing the effectiveness of existing schemes to promote exports
- Addressing issues related to logistics, export credits and trade facilitation
- Suggesting ways to enhance the availability of data on trade such that it is reliable, globally comparable and timely, particularly with respect to trade in services.

Background:

Incidentally, the "Three Years Action Agenda" unveiled by the Finance Minister Arun Jaitley recently had also stressed on creation of well-paid jobs by exploiting the potential in exports. The action agenda had also laid emphasis on creation of well-paid jobs by expanding the formal sector.

Way ahead:

While the Indian workforce has high aspirations, a majority of the workers are still employed in low-productivity, low-wage jobs in small, micro and own-account enterprises. An urgent and sustained expansion of the organized sector is essential to address India's unemployment and under-employment issue. An important strategy is also to enable a shift towards more labour-intensive goods and services that are destined for exports. Given the importance of exports in generating jobs, India needs to create an environment in which globally competitive exporters can emerge and flourish.

Sources: the hindu.

DIPP to move cabinet note on guarantee fund for startups

Keen to ease the flow of loans to startups, the Department of Industrial Policy and Promotion (DIPP) will move a cabinet note on a credit guarantee fund for budding entrepreneurs.

Credit guarantee fund:

The fund was announced by Prime Minister Narendra Modi as part of the Startup India action plan in January 2016.

- The **fund managed by the DIPP** has a corpus of Rs 2,000 crore and will enable greater financial support to startups.
- The **government will use the fund to stand guarantee for loans given to startups.**
- A credit guarantee mechanism will help startups raise debt funding through the formal banking system.

Background:

Start-ups and entrepreneurship are critical to India's efforts to restart private investment into the economy, in the face of risk aversion, stalled or slow investments from corporate India. Start-up India' initiative was launched in January 2016 by Prime Minister Narendra Modi in a move to help start-ups and catalyse entrepreneurship.

- The Start-up India Action Plan lists out a comprehensive set of structural and regulatory reforms – Income tax exemption, easing compliance through reduction of regulations and having fixed qualifications as to what a 'start-up' is.
- The action plan also provided an 80% waiver on patent filing fees by start-ups and advisory services, It also created a Rs.10,000 crore fund-of-funds which is to be managed by professionals drawn from the private sector.

Sources: et.

Corporate debt, a drag on economy

Thomson Reuters data, based on the latest annual earnings reports, shows India's corporate debt rose to a seven-year high at the end of March.

Highlights of the report:

- More than a fifth of large companies did not earn enough to pay interest on their loans and the pace of new loans fell to the lowest in more than six decades.
- Net debt for 288 companies with a market capitalisation of more than \$500 million, covering most big firms in India, has hit at least a seven-year high of ₹18 trillion (\$281 billion). Soured debt was 12% of total loans held by lenders at the end of March.
- More than a fifth of 513 Indian companies had interest cover of less than 1%. New loans are also hard to come by. On an annual basis, the pace of new loans in the year to the end of March, fell to the lowest since the fiscal year ended in March 1954.
- The impact can be seen in the GDP data. Gross capital formation, a gauge of private investment, fell to less than 30% of GDP in the June quarter, from 31% a year earlier and 38% a decade ago.

Concerns associated:

Corporates are more concerned about the impact of soured loans on bank balance sheets, which prevent them from getting the full benefit of central bank rate cuts. That is sapping India's economic vitality, they say. Since January 2015, the central bank has cut policy rates by 200 basis points, or 2 percentage points, but commercial bank benchmark lending rates have come down less, by about 120 basis points.

How bad is India's corporate debt problem compared to its peers?

A cross-country analysis of corporate debt suggests that India's total corporate debt relative to its gross domestic product (GDP) is less than that of several major economies. However, the quality of debt in India is far poorer, with a large fraction of indebted firms losing their repayment ability, and saddling banks with a rising pile of non-performing assets (NPAs). According to the Bank for International Settlements (BIS), **India's corporate debt-to-GDP ratio stood at 51% of GDP** as of 31 March 2016. The size of India's corporate debt, relative to GDP, is much lower than other major economies such as the US (72%) and the European Union (105%).

- The depressed interest coverage ratio of Indian firms is primarily because of two key reasons: the slower revenue growth of indebted firms, and a relatively higher interest rate in India compared to most other economies.
- Given the relatively high interest costs in India, many firms have often opted to raise money from abroad. The outstanding external commercial borrowings (ECBs) amounted to \$177 billion at the end of June 2016—roughly 17% of total corporate debt outstanding. While ECBs allow companies to borrow cheaply, they also expose them to currency risk. In the absence of adequate hedging by corporations, this too could become a point of stress.
- Thus, while India's corporate debt level is not significantly higher than that of its peers, the poor quality of debt and the low repayment ability of indebted firms continue to put an enormous strain on India's economy and the banking system.

Background:

The Indian government reported on August 31 that annual GDP growth in the quarter ended June dropped to 5.7%, an envious pace for many countries but India's weakest since early 2014. It was blamed on attempts by the government to flush out money hidden from the tax man, which caused a cash crunch, and the introduction of a general sales tax (GST), which prompted businesses and consumers to hit the pause button.

Way ahead:

India's fragile corporate metrics and its bad loan problem are but the mirror images of each other. Till the corporate deleveraging cycle bottoms out, bank profitability and credit growth are unlikely to recover.

Sources: the hindu.

GSTN reopens window for composition scheme

The GST Network (GSTN) has reopened the facility for small taxpayers with a turnover of up to Rs 75 lakh to opt for composition scheme. Such small taxpayers will have time till September 30 to opt for the scheme, which offers easy compliance for business as returns are to be filed only quarterly.

What you need to know about the Composition scheme?

The composition scheme is an alternative method of levy of tax designed for small taxpayers whose turnover is up to Rs 75 lakh — Rs 50 lakh in the case of eight north-eastern states and the hilly state of Himachal Pradesh. The objective behind it is to bring simplicity and reduce the compliance cost for small taxpayers.

- **The scheme is optional** under which manufacturers other than those of ice cream, pan masala and tobacco products have to pay a 2% tax on their annual turnover. The tax rate is 5% for restaurant services and 1% for traders.
- As per the Central GST Act, businesses are eligible to opt for the composition scheme if a person is not engaged in any inter-state outward supplies of goods and not into making any supply of goods through an electronic commerce operator who is required to collect tax at source.
- While a regular taxpayer has to pay taxes on a monthly basis, a composition supplier is required to file only one return and pay taxes on a quarterly basis. Also, a composition taxpayer is not required to keep detailed records that a normal taxpayer is supposed to maintain.

Sources: the hindu.

Graded Surveillance Measure

More than 900 companies are being monitored under **the Graded Surveillance Measure**, designed by market regulator Securities and Exchange Board of India (SEBI).

What is the Graded Surveillance Measure?

SEBI introduced the measure *to keep a tab on securities that witness an abnormal price rise that is not commensurate with financial health and fundamentals of the company such as earnings, book value, price to earnings ratio among others.*

Why did SEBI bring in the measure?

The underlying principle behind the graded surveillance framework is to alert and protect investors trading in a security, which is seeing abnormal price movements. SEBI may put shares of companies under the measure for suspected price rigging or under the ambit of 'shell companies'. The measure would provide a heads up to market participants that they need to be extra cautious and diligent while dealing in such securities put under surveillance.

How the Graded Surveillance Measure works?

Once a firm is identified for surveillance it goes through six stages with corresponding surveillance actions and the restrictions on trading in those securities gets higher progressively.

In the first stage the securities are put in the trade-to-trade segment (meaning no speculative trading is allowed and delivery of shares and payment of consideration amount are mandatory). A maximum of 5% movement in share price is allowed.

In the second stage, in addition to the trade-to-trade segment, the buyer of the security has to put 100% of trade value as additional surveillance deposit. The deposit would be retained by the exchanges for a period of five months and refunded in a phased manner.

In the third stage, trading is permitted only once a week ie every Monday, apart from the buyer putting 100% of the trade value as additional surveillance deposit.

In the fourth stage, trading would be allowed once a week and the surveillance deposit increases to 200% of the trade value.

In the fifth stage, trading would be permitted only once a month (first Monday of the month) with additional deposit of 200%.

In the sixth and final stage, there are maximum restrictions. Trading is permitted only once a month at this stage, with no upward movement allowed in price. Also, the additional surveillance deposit would be 200%.

Will securities remain permanently in the Graded Surveillance list?

There would be a quarterly review of securities. Based on criteria, the securities would be moved from a higher stage to a lower stage in a sequential manner.

How would these measures affect small investors?

The challenge for the small investors is that these announcements are often made at very short notice and implemented from the next day itself thus giving those who have already entered the stock less than adequate time to exit it. There is also potentially another risk. For example, even if time is given, the stock might crash next day on the news, triggering the lower price circuit and leaving no exit opportunity.

Sources: the hindu.

India Ranked 40th On World Economic Forum's Global Competitiveness Index

India has been ranked as the 40th most competitive economy – slipping one place from last year's ranking – on the World Economic Forum's global competitiveness index.

Background:

The Global Competitiveness Index (GCI) is prepared on the basis of country-level data covering **12 categories or pillars of competitiveness**.

Institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication and innovation are the 12 pillars.

Performance of India:

India stabilises this year after its big leap forward of the previous two years. The score has improved across most pillars of competitiveness. These include infrastructure (66th rank), higher education and training (75) and technological readiness (107), reflecting recent public investments in these areas.

- According to the report, India's performance also improved in ICT (information and communications technologies) indicators, particularly Internet bandwidth per user, mobile phone and broadband subscriptions, and Internet access in schools.
- However, the WEF said the private sector still considers corruption to be the most problematic factor for doing business in India. The second biggest bottleneck is 'access to financing', followed by 'tax rates', 'inadequate supply of infrastructure', 'poor work ethics in national labour force' and 'inadequately educated work force', among others.
- Another big concern for India is the disconnect between its innovative strength (29) and its technological readiness (up 3 to 107): as long as this gap remains large, India will not be able to fully leverage its technological strengths across the wider economy.

Performance of various countries:

- The list is topped by Switzerland. The US and Singapore are in the second and third places, respectively.
- Other countries in the top 10 are the Netherlands (4th rank), Germany (5), Hong Kong SAR (6), Sweden (7), United Kingdom (8), Japan (9) and Finland (10).
- Among the BRICS nations, China and Russia (38) are placed above India. South Africa and Brazil are placed at the 61st and 80th spots, respectively.
- In South Asia, India has garnered the highest ranking, followed by Bhutan (85th), Sri Lanka (85th), Nepal (88), Bangladesh (99) and Pakistan (115).

Topic: *Inclusive growth and issues arising from it.*

RBI includes HDFC Bank in the 'too big to fail' list

After adding the State Bank of India and private lender ICICI, the Reserve Bank of India has listed **HDFC to systemically important banks list**.

- The addition means that HDFC has now being considered as too big to fail bank. Since 2015, the central bank has been identifying banks whose failure would impact the whole financial system. These banks are subject to more rigorous regulation and capital requirement.

Systematically Important Banks (D- SIBs):

A few banks assume systemic importance due to their size, cross-jurisdictional activities, complexity, lack of substitutability and interconnectedness. The disorderly failure of these banks has the propensity to cause significant disruption to the essential services provided by the banking system, and in turn, to the overall economic activity. These banks are considered Systemically Important Banks (SIBs) as their continued functioning is critical for the uninterrupted availability of essential banking services to the real economy.

- SIBs are perceived as ones that are 'Too Big To Fail (TBTF)'. This perception of TBTF creates an expectation of government support for these banks at the time of distress. Due to this perception, these banks enjoy certain advantages in the funding markets.
- The indicators the RBI uses for identifying Domestic-SIBs are: size, interconnectedness, substitutability and complexity. Based on the sample of banks chosen for computation of their systemic importance, a relative composite systemic importance score of the banks is computed. The RBI will determine a cut-off score beyond which banks will be considered as D-SIBs.
- D-SIBs are subjected to differentiated supervisory requirements and higher intensity of supervision based on the risks they pose to the financial system.

Sources: the hindu.

Peer-to-peer lending platforms to be treated as NBFCs

After a year or more of due-diligence, the RBI has notified that peer-to-peer (P2P) lending platforms need to be regulated and treated on par with non-banking financial companies (NBFCs). In a notification, the RBI has pressed the need for regulation of this segment, which is fairly nascent in India with only 10-12 small players.

- While the final guidelines are still awaited, P2P lending platforms such as LenDen Club, Faircent, Qbera, Lendbox, Rupaiya Exchange and Monexo are a relieved lot. The players, had themselves, been asking the apex bank for regulations that would help bring credibility and trust into the business.

What is P2P lending?

P2P lending is a form of crowd-funding used to raise loans which are paid back with interest. It can be defined as the use of an online platform that matches lenders with borrowers in order to provide unsecured loans. The borrower can either be an individual or a legal person requiring a loan.

The interest rate may be set by the platform or mutual agreement between the borrower and the lender. Fees are paid to the platform by both the lender as well as the borrower. Borrowers pay an origination fee — either a flat rate fee or as a percentage of the loan amount raised — according to their risk category.

Challenges ahead:

At present, the biggest challenge in the sector, which could disrupt the urban financial inclusion space, is that most of the players are outside the formal credit rating and reporting process — a reason why lenders and even several investors shy away from investing.

Way ahead:

At present, there are several players catering to different sets of consumers, from young students to farmers. While the final regulatory framework for P2P lenders is awaited, alternative lending platforms that provide loan comparisons, consumer loans to buy household goods or commercial loans are also seeking some guidelines.

Although nascent in India and not significant in value yet, potential benefits that P2P lending promises to various stakeholders (to borrowers, lenders and agencies) and its associated risks to the financial system are too important to be ignored.

Sources: the hindu.

VASTRA 2017

The 6th edition of VASTRA i.e. **"VASTRA – An International Textile and Apparel Fair 2017"** (VASTRA – 2017) was recently inaugurated at Jaipur.



21 22 23 24 SEPTEMBER, 2017
Jaipur Exhibition & Convention Centre, Sitapura Industrial Area, Jaipur, India.

- Rajasthan State Industrial Development and Investment Corporation Ltd. (RIICO) is the organiser and Federation of Indian Chambers of Commerce and Industry (FICCI) is the co-organiser of the fair.

About VASTRA fair:

VASTRA, an **all-encompassing trade fair and conference on Textiles and Apparel**, presents a fusion of the finest and the latest in textile products – from fibre to fashion, services and technology. Crafted to create business opportunities, it aims at revitalizing existing business ties and forging of new business relations.

- It is the ideal platform to enter JVs, strategic alliances and partnerships worldwide, launch new products, as well as, harness new locations for setting up businesses in India. It is also a place for disseminating technology and interacting with R&D Labs and experts for solution in technology and latest trends.
- VASTRA, since its inception in 2012 has created a space for itself in the calendar of international exhibitions on textiles and apparel.

Sources: pib.

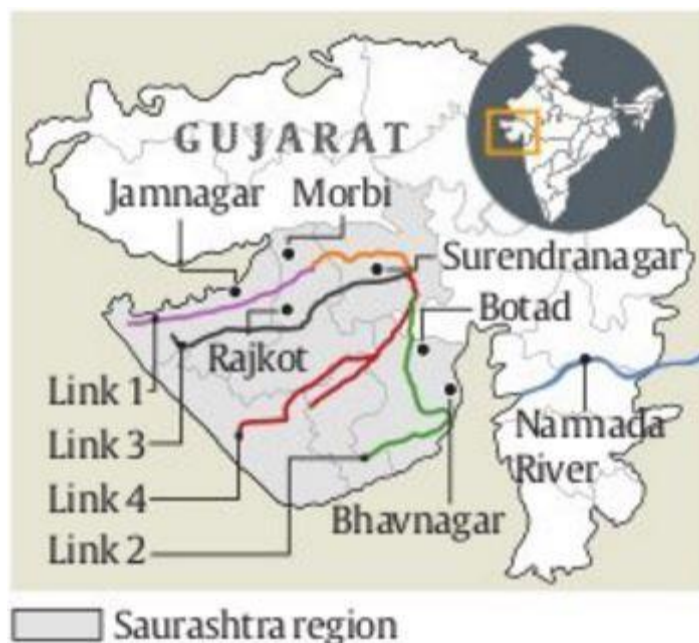
Paper 3 Topic: Major crops cropping patterns in various parts of the country, different types of irrigation and irrigation systems storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

'Saurashtra Narmada Avataram Irrigation Yojana' (SAUNI)

The President of India, Shri Ram Nath Kovind recently laid the foundation stone of 'Saurashtra Narmada Avataram Irrigation Yojana' (SAUNI) Phase-II Link-4 in Rajkot, Gujarat.

What is the SAUNI Yojna?

SAUNI stands for **Saurashtra Narmada Avtaram Irrigation**, a project launched in September 2012. SAUNI envisages **filling 115 major dams of the arid Saurashtra region** by diverting floodwaters overflowing from the Sardar Sarovar Dam across the Narmada in south Gujarat. It involves laying a 1,125-km network of pipelines at a cost of Rs 12,166 crore to carry Narmada water to these dams, and irrigate 4.13 lakh hectares (ha) land. Parts of Saurashtra are prone to drought, and irrigation water is also a politically sensitive issue in this region.



- Unlike traditional irrigation projects, SAUNI is technically a 'linking' project, where the water will be filled in irrigation dams that are already equipped with canal network. This network of canals will then help channel water into farms.
- Also, SAUNI project involves making pipe canals instead of the conventional open canals. The pipelines in the SAUNI project are underground, which means that no land needs to be acquired.

Sources: pib.

Sardar Sarovar Dam

Prime Minister Narendra Modi has inaugurated world's second biggest dam Sardar Sarovar, 56 years after its foundation stone was laid by former PM Jawaharlal Nehru.

Key facts:

- Sardar Sarovar project is the second biggest dam in the world after the Grand Coulee Dam in the United States.
- The Sardar Sarovar Dam has two power houses – river bed power house and canal head powerhouse. The two powerhouses have the installed capacity of 1,200 MW and 250 MW respectively.
- Sardar Sarovar Dam is also the most controversial development project of the nation. Activists have been long demanding that the filling of the reservoir with water be stopped immediately. They want the dam gates to be open to reduce the water level.
- As per the arrangement, the power generated from the Sardar Sarovar Dam will be shared among Maharashtra, Madhya Pradesh and Gujarat. About 57% of the electricity produced from the Sardar Sarovar Dam would go to Maharashtra while Madhya Pradesh will get 27% and Gujarat 16%.

Sources: the hindu.

Paper 3 Topic: Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.

India, China jointly oppose trade-distorting agri subsidies

India and China, in a joint proposal to the World Trade Organization (WTO), have called for elimination of trade-distorting agricultural subsidies given by developed countries. The proposal counters the efforts of some WTO member countries that are targeting the subsidies given by the developing economies to their poor farmers while letting the developed rich nations retain their huge farm subsidies.

- It is an important proposal by India and China in view of **the ongoing negotiations for the ministerial conference of the WTO to be held in Buenos Aires in December.**

What's the issue?

India and China have raised objections over developed countries, including the US, the EU and Canada, that have been consistently providing trade-distorting subsidies to their farmers at levels much higher than the ceiling applicable to developing countries. In WTO parlance, these subsidies are called as **Aggregate Measurement of Support (AMS) or Amber Box support.**

- The subsidies by the developed countries amount to about USD 160 billion. On the other hand, countries like India provide a subsistence amount of about USD 260 per farmer annually. Most of the developing countries, including India and China, do not have AMS entitlements.
- Besides, developed members of the WTO have access to huge amount of AMS beyond their de minimis — the minimal amount of domestic support that are allowed even though they distort trade up to 5% of the value of production for developed countries, 10% for developing. In contrast, most developing members have access only to de minimis resulting in a major asymmetry in the rules on agricultural trade.

How are subsidies categorised?

The WTO divides subsidies into **amber, blue and green box subsidies**. Amber box are trade-distorting subsidies, blue box are subsidies with restrictions designed to reduce distortion and green box subsidies are non-trade distorting subsidies. Direct cash transfers, coupons and subsidies that do not impact production are not considered trade-distorting subsidies and categorised as green box.

Way ahead:

Elimination of this support, "India and China believe, should be the starting point of reforms rather than seeking reduction of subsidies by developing countries.

Sources: the hindu.

Farm loan waivers a quick-fix, may have adverse impact

Terming farm loan waivers a “quick-fix”, the RBI has again voiced its concern, saying they will lead to a lasting adverse impact on farm productivity.

What's the concern?

According to the Economic Survey 2016-17 (Volume 2), the burden of farm loan waivers could be as much as `2.2-2.7 lakh crore if all states start offering the relief and would stoke short-term deflationary shock in the economy. The survey estimates that loan waivers by all states could reduce aggregate demand by as much as 0.7% of GDP. This is because the states funding the loan waiver would have to prune spending and possibly raise taxes to improve revenue and stick to their fiscal deficit limits, although private demands tends to get a boost from the loan waivers. Even as the central government makes significant efforts toward fiscal consolidation, the higher debt burden of the states could push up general government debt.

Why worry about this?

In the absence of coordinated and sustained efforts to put in place elements of a virtuous cycle of uplift of farmers' income, loan waivers have periodically emerged as a quick fix to ease their distress. Recently, states including Uttar Pradesh and Maharashtra have announced farm loan waivers adding up to Rs 1.3 trillion or 0.8% of GDP this fiscal.

- **Increased discrimination:** Loan waivers also lead to faulty targeting of beneficiaries and resultant discrimination, incentivise wilful defaulters and erode credit discipline.
- **Deteriorating assets quality:** Since waiver announcements and actual dole-out come with a time lag, in this interregnum, the quality of assets deteriorates and bridge provisions crowd out new loans. It impacts public finances via higher than budgeted revenue spends. This will have to be financed by additional market borrowings which push up interest rates, not just for the states but for the entire economy.
- **Collateral damage:** A collateral damage is that private borrowers are crowded out as the cost of borrowing rises. Even if loan waiver is accommodated within the budget, it will force cut-backs in other heads of expenditure.
- Therefore, these loan waivers could impact credit discipline, vitiate credit culture and disincentivise borrowers from repayment. Ultimately loan waivers involve a transfer of resources from tax payers to borrowers which can also crimp consumption redistribution.

Reasons for recurring farm distress:

The recurring farm distress is mainly because of “perennially low investment, archaic irrigation practises, monsoon dependence, fragmented land-holdings, low tech adoption, lack of property rights and low initial networth of farmers.” All these can potentially imprison farmers in a circle of indebtedness with a disturbing frequency.

Way ahead:

There is a need for lasting solutions like building irrigation capabilities and cold storage chains, increased crop insurance coverage, farm infrastructure building, tech-enabled productivity improvement and opening the sector to market forces and open trade can also help.

Sources: the hindu.

FarmerZone: The future of agriculture



The Department of Biotechnology (DBT), under the Ministry of Science and Technology, had recently convened the Smart Agriculture Conclave in New Delhi, in partnership with the UK's Biotechnology and Biological Sciences Research Council (BBSRC) and Research Councils UK (RCUK) India. The objective of this conclave was to set the stage for "FarmerZone".

What you need to know about FarmerZone?

It is a **collective open-source data platform for smart agriculture which will use biological research and data to improve the lives of small and marginal farmers.**

- FarmerZone has been envisioned by the DBT and aligns with the Indian Prime Minister, Mr. Narendra Modi's call for effective decision-making in agriculture that integrates science, technology, innovation and the farm ecosystem.
- It is envisaged that "FarmerZone" will help cater to all needs of the farmer, from dealing with climate change, weather predictions and soil, water, and seed requirements to providing market intelligence.
- The FarmerZone platform will connect farmers and scientists, government officials, thought leaders in agriculture, economists and representatives from global companies who work in the big-data and e-commerce space to bring about technology-based localised agri-solutions.
- The platform will work on getting relevant quality data related to agriculture into the cloud, develop sentinel sites to help link with farmers and evolve PPP based enterprises for data delivery.

Sources: pib.

Hortinet

To harness the potential of mobile technology, APEDA has developed a **mobile app- Hortinet-** to allow farmers to apply on-line to facilitate their farm registration, tracking the status of application & approvals by State Government and Lab sampling by authorized Laboratories.

- This mobile app initiative is expected to increase the accessibility and reach of the Traceability software system among the farmers and other stakeholders.

About Hortinet:

Hortinet is an **integrated traceability system developed by APEDA for providing Internet based electronic services to the stakeholders** for facilitating farm registration, testing and certification of Grape, Pomegranate and Vegetables for export from India to the European Union in compliance with standards.

This new Mobile app will also assist State Horticulture/ Agriculture Department to capture real time details of farmers, farm location, products and details of inspections like date of inspection, name of inspecting directly from field. After registration and approval of farm, farmer gets approval information.

The key features of the app are:

- Online Farm registration application and status tracking
- Processing and approval on on-line farmer applications by State Horticulture /Agriculture department.
- Registration of farmers, farms and products by State Horticulture/Agriculture department
- Capture geo location of the farms registered through the app
- Sample collection by APEDA authorized Laboratories along with geo location of the sample.

About APEDA:

The Agricultural and Processed Food Products Export Development Authority (APEDA) was established by the Government of India under the Agricultural and Processed Food Products Export Development Authority Act 1985. The Authority replaced the Processed Food Export Promotion Council (PFEPCC).

APEDA is mandated with the responsibility of export promotion and development of the following scheduled products:

- Fruits, Vegetables and their Products.
- Meat and Meat Products.
- Poultry and Poultry Products.
- Dairy Products.
- Confectionery, Biscuits and Bakery Products.
- Honey, Jaggery and Sugar Products.
- Cocoa and its products, chocolates of all kinds.
- Alcoholic and Non-Alcoholic Beverages.
- Cereal and Cereal Products.

Administrative set up:

- Chairman – Appointed by the Central Government.
- Director – Appointed by APEDA.
- Secretary – Appointed by the Central Government.
- Other Officers and Staff – Appointed by the Authority.

Sources: pib.

Farm loan waiver may push inflation by 0.2%: RBI paper

In India, farm loan waivers have been announced intermittently by both the central and state governments to provide relief to farmers facing distress due to natural calamities/crop failure. However, according to a recent report by the RBI, farm loan waiver amounting to Rs 88,000 crore likely to be released in 2017-18 by seven states, including Uttar Pradesh and Maharashtra, may push inflation on permanent basis by 0.2%.

Other associated concerns:

- The total loan waiver amount that is likely to be released in 2017-18 by seven states is around Rs 881 billion (0.5% of Gross Domestic Product, GDP). It is said that Loan waivers could add to the fiscal burden over the medium term as they are essentially a transfer from taxpayers to borrowers.
- Besides, random fiscal policy shocks, such as loan waivers, have an enduring impact on market borrowings, as evident from past episodes of such waivers.

Background:

Andhra Pradesh and Telangana had announced farm loan waiver in 2014; Tamil Nadu in 2016; and Uttar Pradesh, Maharashtra, Punjab and Karnataka in 2017.

Drawbacks of loan waivers:

- **Firstly, it covers only a tiny fraction of farmers.** The loan waiver as a concept excludes most of the farm households in dire need of relief and includes some who do not deserve such relief on economic grounds.
- **Second, it provides only a partial relief to the indebted farmers** as about half of the institutional borrowing of a cultivator is for non-farm purposes.
- **Third, in many cases, one household has multiple loans** either from different sources or in the name of different family members, which entitles it to multiple loan waiving.
- **Fourth, loan waiving excludes agricultural labourers** who are even weaker than cultivators in bearing the consequences of economic distress.
- **Fifth, it severely erodes the credit culture**, with dire long-run consequences to the banking business.
- **Sixth, the scheme is prone to serious exclusion and inclusion errors**, as evidenced by the Comptroller and Auditor General's (CAG) findings in the Agricultural Debt Waiver and Debt Relief Scheme, 2008.
- **Lastly, schemes have serious implications for other developmental expenditure**, having a much larger multiplier effect on the economy.

What needs to be done?

- **Proper identification:** For providing immediate relief to the needy farmers, a more inclusive alternative approach is to identify the vulnerable farmers based on certain criteria and give an equal amount as financial relief to the vulnerable and distressed families.
- **Enhance non-farm income:** The sustainable solution to indebtedness and agrarian distress is to raise income from agricultural activities and enhance access to non-farm sources of income. The low scale of farms necessitates that some cultivators move from agriculture to non-farm jobs.
- **Improved technology, expansion of irrigation coverage, and crop diversification** towards high-value crops are appropriate measures for raising productivity and farmers' income. All these require more public funding and support.

Sources: the hindu.

Punjab okays crop loan waiver scheme

The Punjab government has given its nod to notify the crop loan waiver scheme announced by Chief Minister Capt. Amarinder Singh in the State Assembly earlier in June this year. The state Cabinet in its meeting has decided that besides taking over the entire eligible loan amount of the farmers covered by the debt waiver scheme, the government would also take over the outstanding interest from April 1, 2017, till the date of notification.

- The notification envisages that in case of marginal farmer (less than 2.5 acres) the entire eligible amount of those farmers who have total outstanding crop loan liability up to ₹2 lakh shall be provided as debt relief and in case of eligible amount of more than ₹2 lakh, only ₹2 lakh shall be provided as debt relief.
- In case of small farmers (from 2.5 acres to less than 5 acres), the entire eligible amount of those farmers who have total outstanding crop loan liability up to ₹2 lakh, shall be provided as debt relief. The scheme will directly benefit nearly 10.25 lakh farmers across the State.

Concerns:

According to the Economic Survey 2016-17 (Volume 2), the burden of farm loan waivers could be as much as ₹2.2-2.7 lakh crore if all states start offering the relief and would stoke short-term deflationary shock in the economy. The survey estimates that loan waivers by all states could reduce aggregate demand by as much as 0.7% of GDP. This is because the states funding the loan waiver would have to prune spending and possibly raise taxes to improve revenue and stick to their fiscal deficit limits, although private demands tends to get a boost from the loan waivers. Even as the central government makes significant efforts toward fiscal consolidation, the higher debt burden of the states could push up general government debt.

Way ahead:

It appears that loan waiving can provide a short-term relief to a limited section of farmers; it has a meagre chance of bringing farmers out of the vicious cycle of indebtedness. There is no concrete evidence on reduction in agrarian distress following the first spell of all-India farm loan waiver in 2008. In the longer run, strengthening the repayment capacity of the farmers by improving and stabilising their income is the only way to keep them out of distress.

Sources: the hindu.

Paper 3 Topic: Food processing and related industries in India- scope and significance, location, upstream and downstream requirements, supply chain management.

“Dairy Processing & Infrastructure Development Fund”

The Cabinet Committee on Economic Affairs has approved a **Dairy Processing & Infrastructure Development Fund (DIDF)** with an outlay of Rs 10,881 crore during the period from 2017-18 to 2028-29.

The major activities of DIDF:

The project will focus on building an efficient milk procurement system by setting up of chilling infrastructure & installation of electronic milk adulteration testing equipment, creation/modernization/expansion of processing infrastructure and manufacturing faculties for Value Added Products for the Milk Unions/ Milk Producer Companies.

Management of DIDF:

The project will be **implemented by National Dairy Development Board (NDDB) and National Dairy Development Cooperation (NCDC)** directly through the End Borrowers such as Milk Unions, State Dairy Federations, Multi-state Milk Cooperatives, Milk Producer Companies and NDDB subsidiaries meeting the eligibility criteria under the project.

- An Implementation and Monitoring Cell (IMC) located at NDDB, Anand, will manage the implementation and monitoring of day-to-day project activities.
- The end borrowers will get the loan @ 6.5% per annum. The period of repayment will be 10 years with initial two years moratorium.
- The respective State Government will be the guarantor of loan repayment. Also for the project sanctioned if the end user is not able to contribute its share; State Government will contribute the same.

Benefits from DIDF:

With this investment, 95,00,000 farmers in about 50,000 villages would be benefitted. Additional Milk processing capacity of 126 lakh litre per day, milk drying capacity of 210 MT per day, milk chilling capacity of 140 lakh litre per day, installation of 28000 Bulk Milk Coolers (BMCs) along with electronic milk adulteration testing equipment and value added products manufacturing capacity of 59.78 lakh litre per day of milk equivalent shall be created.

Employment Generation Potential:

The implementation of DIDF scheme will generate direct and indirect employment opportunities for skilled, semi-skilled and unskilled manpower.

- **Direct employment opportunities** for about 40,000 people will be created under the scheme through project activities like expansion & modernisation of existing milk processing facilities, setting up of new processing plants, establishment of manufacturing facilities for value added products and setting up of Bulk Milk Coolers (BMCs) at village level.
- About 2 lakh **indirect employment opportunities** will be created on account of expansion of milk and milk product marketing operations from existing Tier I, II & III to Tier IV, V & VI cities/towns etc. This will lead to deployment of more marketing staff by Milk Cooperatives, appointment of distributors and opening of additional milk booths/retail outlets in urban/rural locations.
- With the increase in milk procurement operations of the Milk Cooperatives, **there would be generation of additional manpower employment for supervision of increased milk procurement operations, transportation of milk from villages to processing units, and increased input delivery services** like Artificial Insemination (AI) services, Veterinary Services, etc.

Sources: pib.

Topic: Investment models.

Centre announces new PPP Policy to promote private investments in affordable housing

Central Government has announced a new PPP Policy for Affordable Housing that allows extending central assistance of up to Rs.2.50 lakh per each house to be built by private builders even on private lands besides opening up immense potential for private investments in affordable housing projects on government lands in urban areas.

- This policy seeks to assign risks among the government, developers and financial institutions, to those who can manage them the best besides leveraging under utilized and un-utilized private and public lands towards meeting the Housing for All target by 2022.

The policy gives eight PPP (Public Private Partnership) options for private sector to invest in affordable housing segment. Eight PPP options, including six for promoting affordable housing with private investments using government lands have been evolved after extensive consultations with States, promoter bodies and other stakeholders.

Two models using private lands:

The two PPP models for private investments in affordable housing on private lands include extending central assistance of about Rs.2.50 lakh per each house as interest subsidy on bank loans as upfront payment under the Credit Linked Subsidy Component (CLSS) component of Pradhan Mantri Awas yojana (Urban). Under the second option, central assistance of Rs.1.50 lakh per each house to be built on private lands would be provided, in case the beneficiaries do not intend to take bank loans.

The six models using government lands are:

- **DBT Model:** Under this option, private builders can design, build and transfer houses built on government lands to public authorities. Government land is to be allocated based on the least cost of construction. Payments to builders will be made by the public authority based on progress of project as per agreed upon milestones and buyers will pay to the Government.
- **Mixed Development Cross –subsidized Housing:** Government land to be allotted based on number of affordable houses to be built on the plot offered to private builders, cross subsidizing this segment from revenues from high end house building or commercial development.
- **Annuity Based Subsidized Housing:** Builders will invest against deferred annuity payments by the Government. Land allocation to builders is based on unit cost of construction.
- **Annuity-cum-Capital Grant Based Affordable Housing:** Besides annuity payments, builders could be paid a share of project cost as upfront payment.
- **Direct Relationship Ownership Housing:** As against government mediated payments to builders and transfer of houses to beneficiaries in the above four models, under this option, promoters will directly deal with buyers and recover costs. Allocation of public land is based on unit cost of construction.
- **Direct Relationship Rental Housing:** Recovery of the costs by builders is through rental incomes from the houses built on government lands.

Under these six Government land based PPP models, beneficiaries can avail central assistance of Rs.1.00 to Rs.2.50 lakh per house as provisioned under different components of PMAY(Urban). Beneficiaries will be identified as per the norms of PMAY(Urban).

Way ahead:

Concerns have been expressed over the private sector so far not entering affordable housing segment despite huge scope for the same under Pradhan Mantri Awas Yojana (Urban) and an enabling eco-system put in place through several concessions and incentives offered including the grant of infrastructure status for this segment. With the new policy in place, it is expected that the private sector will actively participate.

Sources: pib.

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

Undersea line from Iran to port cheap gas

A 1,300-km undersea pipeline from Iran, avoiding Pakistani waters, has been proposed to port cheap gas. It is said that this pipeline can bring natural gas from the Persian Gulf to India at rates less than the price of LNG available in the spot market.

Key facts:

- As per the proposal, the pipeline can first travel to Oman, and then onwards to Porbandar in the state of Gujarat.
- The pipeline is planned to carry 31.5 million standard cubic meters gas per day and will be built in two years from the date of necessary approvals and a gas sale and purchase agreement (GSPA) being signed.
- The subsea pipeline is being seen as an alternative to the on-land, Iran-Pakistan-India pipeline. New Delhi has not been participating in talks on the 1,036-km Iran-Pakistan-India gas pipeline since 2007 citing security and commercial concerns. But, it has never officially pulled out of the \$7.6 billion project.



Benefits of the proposed pipeline:

Presently, liquefied natural gas, or LNG, imported through ships costs about \$7.50 per million British thermal unit. However, natural gas imported through the proposed \$4-billion line would cost \$5-5.50 per million British thermal unit at the Indian coast, cheaper than the rate at which some of the domestic fields supply gas. Therefore, the cost of landed gas through an undersea pipeline will be at least \$2 cheaper than importing LNG, saving about \$1 billion annually.

About Iran- Pakistan- India (IPI) gas pipeline:

IPI pipeline was envisaged to transport natural gas from South Pars gas field of Iran to Pakistan and India with a carrying capacity of 60 million standard cubic meters per day, to be equally split between India and Pakistan. The total length of the pipeline up to Indian border (near Barmer) was about 2,135 km (1,100 kms within Iran and the rest within the territory of Pakistan). As per past estimates, investments required for this pipeline were in excess of \$7 billion.

Sources: the hindu.

UJALA scheme launched in Melaka, Malaysia

India's zero-subsidy UJALA programme has paved the way for a brighter future and has now travelled to Malaysia. **Energy Efficiency Services Limited (EESL), under Ministry of Power, Government of India has launched UJALA (Unnat Jyoti by Affordable Lighting for All) Scheme in the State of Melaka, Malaysia.** The scheme has seen successful implementation in the UK.



- With a fairly large switch to LED bulbs, Melaka will also be able to reduce carbon emissions by around 19,000 tonnes per year.

Key facts:

- Under the scheme, each household in Melaka will get 10 high quality 9-watt LED bulbs at a cost of only RM 10 (10 Malaysian Ringgit), which is a special price and is almost half of what is being offered in the market.
- The EESL plans to distribute about 1 million 9W LED bulbs, replacing 18W CFLs in Melaka.
- The initiative will have the logistical assistance and facilitation support from Green Growth Asia, a non-profit organisation in Malaysia.
- The price of each bulb will be way lesser than global average price of LED bulbs, which still swings between 3-5 USD.

About UJALA scheme:

The **main objective of the scheme is to promote efficient lighting, enhance awareness on using efficient equipment** which reduce electricity bills and help preserve environment.

The scheme is being implemented by Energy Efficiency Services Limited (EESL), a joint venture of PSUs under the Union Ministry of Power. The scheme will not only help reduce consumers their electricity bills but also contribute to the energy security of India.

Sources: pib.

Considering to extend FAME-India scheme

The centre is considering the extension of FAME- India scheme to promote electric and hybrid vehicles by another six months.

Background:

The scheme's phase-I was introduced from April 1, 2015, to March 31, 2017. The phase was subsequently extended by six months till September end.

About FAME India scheme:

FAME India – Faster Adoption and Manufacturing of Hybrid and Electric vehicles in India – is a part of the National Electric Mobility Mission Plan.

- The scheme has four focus areas, technology development, demand creation, pilot projects and charging infrastructure.
- The scheme envisages Rs 795 crore support in the first two fiscals starting with the current year.
- It is being administered by the Heavy Industries Ministry.

Sources: the hindu.

Cabinet approves survey of Un-appraised Areas of Sedimentary Basins of India

The Cabinet Committee on Economic Affairs has given its approval for a significant project to acquire 48,243 Line Kilometer (LKM) 2D seismic data for appraisal of Indian sedimentary basins where limited data is available. The project will help in increasing the investments in domestic production of oil and gas.

Key facts:

- The project will be implemented by NOCs, i.e. Oil India Limited (OIL) and Oil and Natural Gas Corporation (ONGC). OIL will conduct survey in North – Eastern States while remaining area will be covered by ONGC. Survey work will be carried out in 24 States.
- Total estimated cost of the entire project is Rs. 2932.99 crore spread over five years. Initially National Oil Companies (NOCs) are meeting the fund requirement from their own sources, which will be reimbursed by the Government.
- Entire project is likely to be completed by 2019-20. Directorate General of Hydrocarbons is monitoring the project and reviewing the progress on monthly basis.
- Project involves engagement of large number of workers at local level where work is to be executed. This is likely to generate direct as well as indirect employment for about 11,000 people in the form of skilled and unskilled workers and suppliers for support services.

Background:

India has 26 sedimentary basins covering an area of 3.14 Million Sq Km spread over onland, shallow water and deep water. An area of about 1.502 Million Sq. Km i.e. 48% of total sedimentary basin area does not have adequate geo-scientific data. As a base to launch future Exploration and Production (E&P) activities, appraisal of all unappraised areas has been considered an important task. The preparatory work started in 2015-16 and actual survey work started in 2016-17 and more than 9100 LKM 2D seismic data has been acquired till July, 2017.

Data acquisition is important as it helps in giving the initial insight into the basins and helps in planning the future E&P activities. It will be useful in deciding the focus areas of the exploration activities in the country and on the basis of this primary data, E&P companies would take up further exploration activities in the acreages allocated to them.

Sources: pib.

Hiving off mobile tower assets of Bharat Sanchar Nigam Limited into a separate company, fully owned by BSNL

The Union Cabinet has given its approval for hiving off mobile tower assets of Bharat Sanchar Nigam Limited (BSNL) into a separate company, fully owned by BSNL.

Key facts:

- This approval authorizes BSNL to monetize its telecom tower infrastructure with the formation of a separate subsidiary company.
- An independent, dedicated tower company of BSNL with a focused approach will lead to increasing of external tenancies and consequentially higher revenue for the new company.
- There are around 4,42,000 mobile towers in the country out of which more than 66,000 mobile tower are of BSNL.

Different business models in the telecom industry:

Besides the **captive model** in BSNL and MTNL where the service provider owns their passive infrastructure also, there are three different business models within the telecom tower industry:- *companies created by hiving off the tower assets portfolios of service providers into subsidiaries, companies established as independent joint venture entities by service providers jointly and companies promoted by specific service providers but established as independent entities with the promoter being the anchor tenant for the tower company.*

Background:

The telecom tower industry has emerged as an independent business to harness the potential for sharing of infrastructure. The business model arose from the need to achieve economies of scale and to reduce capital investment costs for providing mobile services. The Department of Telecommunications (DoT) policy allows sharing of passive infrastructure i.e. the tower structure, Diesel Generator sets, battery units, power interface unit, air-conditioning etc., which has facilitated the growth of the telecom infrastructure industry.

A **tower infrastructure company** essentially owns the passive infrastructure asset and leases it to telecom service providers enabling them to minimize duplication of investments and economize on costs of Operation and Maintenance (O&M), thereby improving profitability.

Sources: pib.

SAIL's retail sales gets boost with SAIL's Gaon ki Ore campaign

Steel Authority of India Ltd. (SAIL), is running a nation-wide campaign SAIL steel – **Gaon ki ore** which is *aimed at boosting steel consumption in country*. This has started to reflect positively through the dealer sales numbers, which recorded an 18% jump in the month of August 2017 over CPLY selling 91,000 tonnes of steel in the month. SAIL targets to sell 1 Million Tonnes steel through its dealer network this financial year and aims at doubling it in next three financial years.

Background:

SAIL had identified the potential of rural markets for enhancing steel consumption which is currently around 10 kgs per capita per year as against around 150 Kg per capita consumption in Urban India.

About Gaon ki ore campaign:

The Gaon ki ore campaign is designed to *familiarize end users at the Grass-root level, especially of rural areas, with innovative usage of SAIL steel and its applications and advantages in construction, household equipment, agriculture etc.*

- Through this nation-wide campaign, SAIL aims to cover more than 100 locations by the end of this year. Through engagement activities the audience are informed how using SAIL steel can increase durability, life, safety and longevity of any construction and product.
- This new age marketing campaign strategically aims to develop a stronger link with consumers through direct engagement. All workshops of the campaign are designed to familiarize participants about SAIL's production process, product range, applications and advantages and the interactive sessions are conducted in local language for easier connect with audience.

Sources: pib.

India's first bullet train project

Prime Minister Narendra Modi and his Japanese counterpart Shinzo Abe recently laid the foundation stone for India's first bullet train project in Ahmedabad.

Key facts:

- The 508km-long **Mumbai to Ahmedabad High Speed Rail (MAHSR)** is scheduled for completion in December 2023.
- The train will have a top speeds of 320-350 km per hour and it is expected to reduce travel time between the two cities to around 2 hours from the existing 7-8 hours.
- The much-touted rail project, which will connect Ahmedabad to Mumbai in just two hours, promises to transform railways and 'create new India'.
- According to initial estimates, around 1.6 crore people are expected to travel by the bullet train annually. By 2050, around 1.6 lakh commuters should travel by the high-speed train on a daily basis.
- To fund the ambitious Rs 1,10,000-crore project, a loan of Rs 88,000 crore will be taken from Japan. The Japan International Cooperation Agency (JICA) will fund it at a low rate of interest of 0.1% per annum. This loan has to be repaid to Japan in 50 years, with 15 years grace period.



How will this project help India in its growth?

New production bases and townships will eventually expand along the MAHSR. The trickle-down effects of opening avenues for cheaper housing, logistics hubs, and industrial units along the route will benefit smaller towns and cities. The districts of Palghar in Maharashtra and Valsad in Gujarat, along with the Union Territory of Daman, will have a great shot at attracting new investments and amenities.

Construction activity will boost allied industries such as steel, cement and infrastructure. This will translate into additional logistics and warehousing demand. It is estimated that an additional annual cement demand of two million tonnes and steel demand of five lakh tonnes will be generated over four years by the MAHSR project. This will help near-term economic growth which has been sluggish in the last few quarters.

New temporary and permanent jobs will also be created with most of the manufacturing, from components to rolling stock, done in India. The construction phase will create opportunities for employment for about 20,000 people. After the commissioning of the project, there will be job openings for 4,000 for the operation and maintenance of the line. Further, some 16,000 indirect employment opportunities are expected to be generated.

Managing a project of this complexity and scale will be a great learning experience for the Indian agencies involved, resulting in skill development. The safety standards of Shinkansen will be something to learn from. India is already planning to set up an HSR training institute at Vadodara. Expected to be functional by 2020, it will train up to 4,000 individuals in high quality rail technology following Japanese standards, methods and tools. Indian Railways will train 300 of its officials on rail technology in Japan.

Background:

Japan is a pioneer in high-speed rail networks, and its Shinkansen bullet train is among the fastest in the world. India will also get the safe Shinkansen technology but it would manufacture parts in the country under 'Make in India'.

Shinkansen, meaning 'new trunk line', are trains shaped like bullets that run at the speed of 320 kmph. They have become a symbol of the country's progress and technological advancements after the World War 2. Shinkansen have

a reputation for punctuality and safety. The trains have never been in any accident since 1964, when they were introduced. The staff is asked to give an explanation if the trains are more than a minute late.

Way ahead:

The success of this project, however, will lie in its execution. Its successful and timely completion could act as a powerful catalyst to create a culture of efficient project implementation in India. Similarly, there should be a focus on leveraging the post-implementation synergies, which could make this a transformational project for India.

Sources: the hindu.

NGT paves way for Chardham highway project

The National Green Tribunal (NGT) has paved the way for the NH-34 stretch of the PMO's ambitious Chardham highway widening project, that will connect Uttarakhand's holy sites, as it disposed of a plea that alleged that the project was violating provisions of Bhagirathi eco-sensitive zone.

- In an undertaking, the Uttarakhand state government and the Border Roads Organisation assured the green court that the project would be carried out with due compliance of laws in force.

Background:

A plea was filed before the NGT. It had raised an alarm about mountain blasting and felling of thousands of trees in the Bhagirathi river valley for widening of National Highway-34. One of the related petitions in the matter also pertained specifically to a nine-km stretch in Bhairon Ghati on the Uttarkashi to Gangotri route. It had said that debris were being dumped into the river valley during the road widening. In fact, during a hearing on May 4, the state government had admitted that BRO dumped muck on the fragile hill slopes.

Chardham project:

In December 2016, Prime Minister Narendra Modi laid the foundation stone for the all-weather Chardham highway project. The project involves developing and widening 900-km of national highways connecting the holy Hindu pilgrimage sites of; Badrinath, Kedarnath, Gangotri, and Yamunotri at an estimated cost of Rs.12,000 crores. The roads will be widened from 12m to 24m and the project will involve construction of tunnels, bypasses, bridges, subways and viaducts.

Sources: et.

Maharashtra approves 50 per cent cost sharing for Sagarmala project

The Maharashtra government approved the implementation of the Centre's ambitious Sagarmala project, with a 50% cost sharing by the state.

What you need to know about Sagarmala?

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: the hindu.

Intelligent Transportation Systems (ITS)

The National Institution for Transforming India (NITI Aayog) and the International Road Federation, Geneva (IRF Geneva) have, today, signed a Statement of Intent (Sol) to cooperate in the field of Intelligent Transportation Systems (ITS).

The objective of the Sol is to create a national platform, involving all relevant Government of India stakeholders, Indian and foreign companies active in the sector, and relevant technical experts for the purpose of developing a National ITS Policy covering:

- Traffic Management.
- Parking Management.
- Electronic Enforcement of Traffic Rules and Regulations.
- Fleet Management and Monitoring.
- Innovation in the field of ITS.
- Education in the field of ITS.

Objective of the policy:

The objectives of this national ITS Policy will be to contribute to reducing urban traffic congestion, improving the situation around parking of vehicles in cities, improving road safety, and improving the security of passenger and goods traffic. The work of this National Platform will provide a coherent and consistent National ITS Policy covering domains such as traffic and parking management, enforcement, and security.

About International Road federation:

The International Road Federation (IRF) is a **nongovernmental, not-for-profit organisation with the mission to encourage and promote development and maintenance of better, safer and more sustainable roads and road networks**. Working together with its members and associates, the IRF promotes social and economic benefits that flow from well-planned and environmentally sound road transport networks. It helps put in place technological solutions and management practices that provide maximum economic and social returns from national road investments.

- The IRF has a major role to play in all aspects of road policy and development worldwide. For governments and financial institutions, the IRF provides a wide base of expertise for planning road development strategy and policy.
- **For its members**, the IRF is a business network, a link to external institutions and agencies, such as the United Nations and the European Union, and a business card of introduction to government officials and decision makers.
- **For the community of road professionals**, the IRF is a source of support and information for national road associations, advocacy groups, companies and institutions dedicated to the development of road infrastructure.
- Through the International Road Educational Foundation the IRF awards grants to graduate engineers and other transportation professionals from around the world in support of full-time academic training. With this the IRF actively supports the future generations who will build the road networks.

Sources: pib.

Japan to fund mass rapid transit systems in Gujarat, Haryana

Funds from a Japanese government loan will soon be utilised for the first time in the \$100 billion, Delhi-Mumbai Industrial Corridor (**DMIC**) project. So far, the mega-project was being developed only with the Indian government's financial assistance.

- A soft loan (with concessional conditions) to the tune of \$4.5 billion to be extended by the Japan International Cooperation Agency (JICA), will shortly be utilised to develop two Mass Rapid Transit Systems (MRTS) — one each in Gujarat and Haryana — that will be part of the DMIC.

About DMIC:

Delhi-Mumbai Industrial Corridor is a mega infra-structure project of USD 90 billion with the financial & technical aids from Japan, covering an overall length of 1483 KMs between the political capital and the business capital of India, i.e. Delhi and Mumbai. A MoU in this regard was signed in 2006.

- **The project would include six mega investment regions** of 200 square kilometres each and will run through six states Delhi, Western Uttar Pradesh, Southern Haryana, Eastern Rajasthan, Eastern Gujarat, and Western Maharashtra.
- The project *aims to develop an environmentally sustainable, long lasting and technological advanced infrastructure utilizing cutting age Japanese technologies and to create world class manufacturing and investment destinations in this region.*

Sources: the hindu.

PM launches Pradhan Mantri Sahaj Bijli Har Ghar Yojana “Saubhagya”

A new scheme called **Pradhan Mantri Sahaj Bijli Har Ghar Yojana –“Saubhagya”** has been launched to ensure electrification of all willing households in the country in rural as well as urban areas.

Key facts:

- The total outlay of the project is Rs. 16, 320 crore while the Gross Budgetary Support (GBS) is Rs. 12,320 crore.
- The States and Union Territories are required to complete the works of household electrification by the 31st of December 2018.
- The beneficiaries for free electricity connections would be identified using Socio Economic and Caste Census (SECC) 2011 data. However, un-electrified households not covered under the SECC data would also be provided electricity connections under the scheme on payment of Rs. 500 which shall be recovered by DISCOMs in 10 instalments through electricity bill.
- **The Rural Electrification Corporation Limited (REC) will remain the nodal agency** for the operationalisation of the scheme throughout the country.

The expected outcome of the Scheme is as follows:

- Environmental upgradation by substitution of Kerosene for lighting purposes.
- Improvement education services.
- Better health services.
- Enhanced connectivity through radio, television, mobiles, etc.
- Increased economic activities and jobs.
- Improved quality of life especially for women.

Sources: pib.

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.*

World's biggest X-ray laser gun

The world's largest X-ray laser- European X-ray Free Electron Laser (XFEL)- is all set to open in Germany, promising to shed new light onto very small things by letting scientists penetrate the inner workings of atoms, viruses and chemical reactions.

Key facts:

- The 1.5-billion-euro (\$1.7 billion) facility, which took 8 years to build with funding from 11 countries, has been hailed as one of the largest and most ambitious European research projects ever.



- It boasts a list of superlatives: the light's brilliance is a billion times higher than that of the best conventional X-ray sources.
- The mega-project will generate extremely intense laser flashes, at a mind-boggling rate of 27,000 per second, inside a 3.4-kilometer (2.1-mile) tunnel up to 38 meters (125 feet) below the northern city of Hamburg.
- This ultrafast strobe light will allow researchers for the first time to look deep inside matter and take snapshots and films at the nano-level.

Applications:

- The huge laser is "like a camera and a microscope that will make it possible to see more tiny details and processes in the nano-world than ever before. Teams from around the world will be able to map the atomic details of viruses, take 3-D images of the molecular make-up of cells or film chemical reactions as they happen.
- The applications are sweeping – images of biomolecules may help understand and treat illnesses, while a peek inside a building material might explain why it tears or cracks.
- The light beams can also be bundled to create extreme pressure and temperatures to study process like those at the Earth's core.

Sources: the hindu.

Andhra Pradesh to get India's first Hyperloop

The government of Andhra Pradesh has signed a Memorandum of Understanding (MoU) with California-based Hyperloop Transportation Technologies (HTT) to develop India's first Hyperloop route in the state.

Key facts:

- The proposed route for **the Hyperloop between the city centers of Vijaywada and Amaravati** could potentially turn a trip of more than one hour into a 6 minute ride.
- The project will use a Public Private Partnership (PPP) model with funding primarily from private investors.



Background:

Amaravati is a state-of-the-art city being developed in Andhra Pradesh as its *de facto* capital. In order to boost its image and emerge as the frontier city in future technology, Amaravati is looking forward to collaborating with Hyperloop Transportation Technologies. Hyperloop is a cutting-edge technological disruption in the transportation industry.

The Hyperloop is expected to give rise to development of various state-of-the-art technology parks and software clusters in Amaravati, helping to fortify the city's image as a world class leader in science and technology.

What is hyperloop transportation system?

It is a **transportation system where a pod-like vehicle is propelled through a near-vacuum tube** connecting cities at speeds matching that of an aircraft.

How it operates?

In hyperloop transportation, custom-designed capsules or pods are expected to zip smoothly through continuous steel tubes which are held at partial vacuum. The pod which sandwiches the passenger compartment between an air compressor upfront and a battery compartment in the rear is supported by air caster skis at the bottom.

- The skis float on a thin layer of air provided under high pressure, eliminating rolling resistance and allowing for movement of the pods at high speeds. These capsules are expected to be driverless with estimated speeds of 1,000 km/h.
- Linear induction motors that are placed along the tube control the speed of the pod. Electronically-assisted acceleration and braking determines the speed of the capsule.

Sources: et.

Sun and sea water powers vegetable farms in Jordan

A new project named “**Sahara Forest Project**” has been launched in Jordan. It aims to turn Jordan’s sand dunes into farming land to produce food using sun and sea water.

Details of the project:

- In the first stage, the project aims to produce up to 130 tonnes of organic vegetables per year from an area the size of four football pitches. It also produces fresh water.
- It will use solar panels to provide power and include outdoor planting space, two saltwater-cooled greenhouses, a water desalination unit and salt ponds for salt production.
- The project, whose funders include Norway and the European Union, is to be expanded from three hectares to around 200 hectares of desert.



Need for such innovative initiatives:

According to recent United Nations estimations, deserts are expanding 30 times faster than at any time in history. In Africa, where the worst effects of climate changes are already visible, millions are on the move in search of arable land. With the world’s population expected to top 9 billion in 2050, land for food growth is growing scarce.

Way ahead:

The Sahara Forest Project demonstrates that innovative application of technology has the potential to revolutionize our land systems in a way that benefits the climate, people, and businesses.

Sources: the hindu.

Scientists make fuel from oxygen in air

Scientists have found a way to produce methanol — an important chemical often used as fuel in vehicles — using oxygen in the air, an advance that may lead to cleaner, greener industrial processes worldwide.

How was it produced?

Methanol was produced using nanoparticles of gold to initiate a chemical reaction between methane, oxygen and hydrogen peroxide. It can be done in one stage and at temperatures no higher than 50C (122F).

Significance of this discovery:

- It could become an alternative to petrol. It is also believed the new system of creating methanol could be used to create chemicals and plastics.
- The discovery promises to be not only cheaper, but much more environmentally friendly, as it both reduces energy consumption and conserves dwindling stocks of natural gas.
- It also opens up the prospect for the first time of easily converting natural gas into methanol at the site where it is extracted, so that it can be piped as a liquid in normal atmospheric conditions. At the moment methane has to be condensed into liquid natural gas and shipped in pressurised containers.

Background:

Traditionally, methanol is created by converting methane into hydrogen and carbon monoxide at high temperatures, then reassembling them in a different order in a second highly pressurised process. The current two-stage ‘steam reforming’ process is very energy intensive, as it requires a lot of fuel to achieve high temperatures.

Sources: the hindu.

DRDO successfully test fires 'Fire and Forget' Nag missile

In a boost to Indian Armed Forces, Defence Research and Development Organisation (DRDO) recently successfully tested Nag, the 3rd generation Anti Tank Guided Missile (ATGM).

Significance of these trials:

DRDO has been trying to ramp up country's military capability in sync changing security dynamics in the region. With the two successful flights, and the flight test conducted earlier in June in the peak of summer, the complete functionality of Nag ATGM along with launcher system NAMICA has been established, and marks the successful completion of development trials of Nag Missile.



About Nag Missile:

- The third-generation Fire and Forget ATGM Nag is equipped with many advanced technologies including IIR Seeker with integrated avionics, a capability possessed by few nations in the world.
- The missile is developed to support both mechanised infantry and airborne forces of the Indian Army.
- The missile incorporates an advanced passive homing guidance system and possesses high single-shot kill probability.
- It is designed to destroy modern main battle tanks and other heavily armoured targets.

Sources: pib.

Scientists map lunar water with data from Chandrayaan-1

Scientists, using data from an instrument which flew aboard India's Chandrayaan-1 spacecraft, have created **the first map of water trapped in the uppermost layer of the moon's soil**. The study builds on the initial discovery in 2009 of water and a related molecule — hydroxyl, which consists of one atom each of hydrogen and oxygen — in the lunar soil.

- Scientists used a new calibration of data taken from NASA's Moon Mineralogy Mapper, which flew aboard Chandrayaan-1 spacecraft in 2008, to quantify how much water is present on a global scale.

The study found that:

- The signature of water is present nearly everywhere on the lunar surface, not limited to the polar regions as previously reported.
- The amount of water increases toward the poles and does not show significant difference among distinct compositional terrains.
- The water concentration reaches a maximum average of around 500 to 750 parts per million in the higher latitudes. That is less than what is found in the sands of Earth's driest deserts.
- The way water is distributed across the moon gives clues about its source. The distribution is largely uniform rather than splotchy, with concentrations gradually decreasing toward the equator.
- That pattern is consistent with implantation via solar wind — the constant bombardment of protons from the sun.
- Although the bulk of the water mapped in this study could be attributed to solar wind, there were exceptions. For example, the researchers found higher-than-average concentrations of water in lunar volcanic deposits near the moon's equator, where background water in the soil is scarce. Rather than coming from solar wind, the water in those localised deposits likely comes from deep within the moon's mantle and erupted to the surface in lunar magma.
- The concentration of water changes over the course of the lunar day at latitudes lower than 60 degrees, going from wetter in the early morning and evening to nearly bone dry around lunar noon. The fluctuation can be as much as 200 parts per million.

Way ahead:

This is a roadmap to where water exists on the surface of the moon. Now that they have these quantitative maps showing where the water is and in what amounts, scientists can start thinking about whether or not it could be worthwhile to extract, either as drinking water for astronauts or to produce fuel.

About Chandrayaan 1:

The Chandrayaan-1 mission performed high-resolution remote sensing of the moon in visible, near infrared (NIR), low energy X-rays and high-energy X-ray regions.

- One of the objectives was **to prepare a three-dimensional atlas (with high spatial and altitude resolution) of both near and far side of the moon.**
- It aimed at conducting chemical and mineralogical mapping of the entire lunar surface for distribution of mineral and chemical elements such as Magnesium, Aluminium, Silicon, Calcium, Iron and Titanium as well as high atomic number elements such as Radon, Uranium and Thorium with high spatial resolution.

Sources: the hindu.

Successful Development Trials of Astra Missile

The final Development Flight Trials of **Astra – Beyond Visual Range Air to Air Missile (BVRAAM)** was conducted recently over the Bay of Bengal, Off the Coast of Chandipur, Odisha. The trials were successful.

- The missions included engagement of target at very long range, engagement of high manoeuvring target at medium range and multiple launches of missiles in salvo to engage multiple targets.
- All the sub-systems including the indigenous RF Seeker performed accurately, meeting all the mission parameters and objectives.

About Astra:

- It is a **Beyond-Visual Range, air-to-air indigenously developed.**
- The all-weather, radar homing missile has high manoeuvrability and capability to engage and destroy aerial targets at supersonic speeds.
- The 60-km plus range missile possesses Shot Kill Probability (SSKP) making it one of the most reliable in its class of weapon systems.
- The missile could be launched at different altitudes from sea level to 20 km for engaging aerial targets at various ranges.
- Apart from integrating the missile with Su-30, it is planned to be mounted on other fighter aircraft including Tejas Light Combat Aircraft, Mirage-2000 and MIG-29.
- The missile complex at Hyderabad and several DRDO laboratories in partnership with the Hindustan Aeronautics Limited and the Indian Air Force developed Astra.

Sources: pib.

India joins quantum computing race

Keen to tap into the next big advance in computing technology, the Department of Science and Technology (DST) is planning to fund a project to develop quantum computers.

What is quantum computing?

First proposed in the 1970s, quantum computing relies on quantum physics by taking advantage of certain quantum physics properties of atoms or nuclei that allow them to work together as quantum bits, or qubits, to be the computer's processor and memory. By interacting with each other while being isolated from the external environment, qubits can perform certain calculations exponentially faster than conventional computers.

How it works?

A quantum computer, still largely a theoretical entity, employs the principles of quantum mechanics to store information in 'qubits' instead of the typical 'bits' of 1 and 0. Qubits work faster because of the way such circuits are designed, and their promise is that they can do intensive number-crunching tasks much more efficiently than the fastest comparable computers.

Way ahead:

Commercial production of quantum computers that would process information faster than today's supercomputers is still some time away. The industry first has to solve hardware issues in quantum technology, according to an expert. Quantum theory represents the smallest scales and shapes of matter, describing the behaviour of subatomic particles like electrons, protons, neutrons and photons.

Sources: the hindu.

First Of 6 Scorpene-Class Submarines, Kalvari, Handed Over To Navy

Kalvari, the first of the six Scorpene-class submarines, has been handed over to the Indian Navy by shipbuilder Mazgaon Dock limited, paving way for its commissioning soon. The development marks a major milestone in Indian Navy's submarine programme as the vessel is expected to bolster India's maritime prowess.

What you need to know about INS Kalvari?

- Kalvari is named after a deep-sea tiger shark. The Scorpene is part of the ambitious **Project 75** of Indian Navy's submarine programme.
- This type of submarine is designed to operate in all theatres including the Tropics. It can undertake various types of missions that are undertaken by any modern submarine including anti-surface warfare, anti-submarine warfare, mine laying, intelligence gathering, surveillance, etc.
- With its superior stealth capability, it can launch a crippling attack on the enemy using precision guided weapons. The attack can be launched with torpedoes, as well as tube launched anti-ship missiles, whilst underwater or on surface.

Background:

Six Scorpene submarines are being built under Project-75 by Mazgaon Docks Limited (MDL) with technology transfer from France. All the six submarines under this projects will be indigenously built at Mumbai's Mazagaon Dockyard Ltd. These attack submarines have diesel propulsion and an additional air-independent propulsion.

Sources: the hindu.

Pt. Deen Dayal Upadhyay Vigyan Gram Sankul Pariyojana

The government has launched "**Pt Deen Dayal Upadhyay Vigyan Gram Sankul Pariyojana**" which will experiment and endeavour to formulate and implement appropriate S&T Interventions for Sustainable Development through cluster approach in Uttarakhand.

Key facts:

- Under the scheme, the department of science and technology has conceived to adopt a few clusters of villages in Uttarakhand and transform them to become self-sustainable in a time bound manner through the tools of Science and Technology (S&T).
- The key deliverable in this approach is to utilise local resources and locally available skill sets and convert them in a manner using science and technology, that substantial value addition takes place in their local produce and services which can sustain the rural population locally.
- Further, the local communities are not compelled to migrate from their native places in search of jobs and livelihoods.
- Areas of interventions in these selected clusters would be processing and value addition of milk, honey, mushroom, herbal tea, forest produce, horticulture and local crops, medicinal & aromatic plants and traditional craft and handloom of Uttarakhand.

- Post-harvest processing of Kiwi, Strawberry, Cherry, Tulsi, Adrak, Badi Elaichi through solar drying technology, extraction of apricot oil using cold press technology.
- Stringent product and process control interventions for energy and water conservation would also be ensured through this project.
- Practice of agriculture, agro-based cottage industries and animal husbandry in an eco-friendly manner will be emphasized during the implementation of the project.

Benefits of the scheme:

- About a lakh of people would benefit directly or indirectly through this project in four identified clusters of 60 villages in Uttarakhand.
- The adopted strategy would help in creating models that are appropriate for different altitudes and could then be replicated in other hill states as well.
- Sustainable employment and livelihood options within the clusters such as eco-tourism, naturopathy and yoga, are also planned to be promoted.

Way ahead:

Once this concept is validated in the few selected clusters, it can be replicated across large number of village clusters in the country.

Sources: pib.

India's Mars Orbiter Mission completes 3 years in orbit

India's Mars Orbiter Mission has successfully completed 3 years in orbit.

Background:

The country had on 24 September 2014 successfully placed the Mars Orbiter Mission spacecraft in the orbit around the red planet, in its very first attempt, thus breaking into an elite club. ISRO had launched the spacecraft on its nine-month-long odyssey on a homegrown PSLV rocket from Sriharikota in Andhra Pradesh on 5 November 2013. It had escaped the earth's gravitational field on 1 December 2013.

About the Mars Orbiter Mission:

The Rs450-crore MOM mission *aims at studying the Martian surface and mineral composition as well as scan its atmosphere for methane (an indicator of life on Mars).*

- The Mars Orbiter has five scientific instruments—Lyman Alpha Photometer (LAP), Methane Sensor for Mars (MSM), Mars Exospheric Neutral Composition Analyser (MENCA), Mars Colour Camera (MCC) and Thermal Infrared Imaging Spectrometer (TIS).
- **This mission made India to become one of the four nations in the world to send space mission to Planet Mars.**
- **India became the first country in the world to insert a spacecraft into the Martian orbit in its very first attempt.**

Sources: the hindu.

4th gravitational wave detected by LIGO, Virgo observatory

A fourth gravitational wave has been detected — this time with help from Italy-based equipment — after two black holes collided, sending ripples through the fabric of space and time.

- The newly produced spinning black hole has about 53 times the mass of our Sun. While this new event is of astrophysical relevance, its detection comes with an additional asset: this is the first significant gravitational wave signal recorded by the Virgo detector.

Background:

Gravitational waves were predicted by Albert Einstein a century ago as part of his theory of general relativity, but the first hard evidence of their existence came only in 2015, when two U.S. detectors found the first such signal.

About Virgo detector:

The Virgo collaboration includes more than 280 physicists and engineers belonging to 20 different European research groups.

- The Virgo detector — an underground L-shaped instrument that tracks gravitational waves using the physics of laser light and space — recently underwent an upgrade, and while still less sensitive than its U.S. counterparts, it was able to confirm the same signal.
- Known as interferometers, these high-tech underground stations do not rely on light in the sky like a telescope does, but instead sense vibrations in space and can pick up the “chirp” created by a gravitational wave.

What are gravitational waves?

In simple terms, gravitational waves can be explained as ripples in the fabric of space-time which can only be caused by massive astronomical events such as neutron stars or black holes orbiting each other so that these waves would finally radiate from them.

These gravitational waves, if detected, will carry signatures of their origin, explaining much about the nature of gravity and the origin of the universe. They had remained elusive till their detection was first announced last year.

Sources: the hindu.

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

Breakthrough Listen

Astronomers working for Stephen Hawking’s Breakthrough Listen (BL) project detected a mysterious signal in a distant galaxy and termed it a possible extra-terrestrial communication which sparked a controversy. They reportedly picked up 15 fast radio bursts (FRBs) from a source unknown and are not sure if they came from neutron stars, black holes or extraterrestrial lives across the universe.

What is a fast radio burst?

In radio astronomy, a fast radio burst (FRB) is a high-energy astrophysical phenomenon of unknown origin manifested as a transient radio pulse lasting only a few milliseconds. Fast radio bursts are bright, unresolved (pointsource-like), broadband (spanning a large range of radio frequencies), millisecond flashes found in parts of the sky outside the Milky Way. Unlike many radio sources the signal from a burst is detected in a short period of time with enough strength to stand out from the noise floor.

About Breakthrough Listen Project:

Breakthrough Listen is a program to search for intelligent extraterrestrial communications in the Universe. With \$100 million in funding and thousands of hours of dedicated telescope time on state-of-the-art facilities, it is the most comprehensive search for alien communications to date.

The project **uses radio wave observations from the Green Bank Observatory and the Parkes Observatory, and visible light observations from the Automated Planet Finder.** Targets for the project include one million nearby stars and the centers of 100 galaxies.

Sources: the hindu.

Social media campaign to promote Geographical Indications

The Cell for IPR Promotions & Management (CIPAM) under the aegis of Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, has launched a social media campaign to promote Indian Geographical Indications (GIs) with #LetsTalkIP which is an ongoing movement initiated by CIPAM to make more people aware about the importance of Intellectual Property Rights.

What is GI?

A Geographical Indication or a GI is **a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.** Such a name conveys an assurance of quality and distinctiveness which is essentially attributable to its origin in that defined geographical locality. Darjeeling Tea, Mahabaleshwar Strawberry, Blue Pottery of Jaipur, Banarasi Sarees and Tirupati Laddus are some of the GIs.

Significance of GIs:

- GIs are of utmost importance to the country as they are **an integral part of India's rich culture and collective intellectual heritage**.
- The promotion of GIs is **in line with the Government's 'Make in India' campaign**. It's an area of strength and optimism for India, whereby the GI tag has accorded protection to a number of hand-made and manufactured products, especially in the informal sector.
- Certain GI products can benefit **the rural economy in remote areas**, by supplementing the incomes of artisans, farmers, weavers and craftsmen. Our rural artisans possess unique skills and knowledge of traditional practices and methods, passed down from generation to generation, which need to be protected and promoted.

About CIPAM:

Cell for IPR Promotion and Management (CIPAM) has been created as a professional body under the aegis of DIPP to take forward the implementation of the National IPR Policy that was approved by the Government in May 2016, with the slogan – “**Creative India; Innovative India**”. CIPAM is working towards creating public awareness about IPRs in the country, promoting the filing of IPRs through facilitation, providing inventors with a platform to commercialize their IP assets and coordinating the implementation of the National IPR Policy in collaboration with Government Ministries/Departments and other stakeholders.

Sources: pib.

Trai recommends delicensing of some spectrum for M2M services

In order to facilitate the smooth roll-out of **machine-to-machine (M2M) communications** utilising licence exempt airwaves, sectoral regulator Telecom Regulatory Authority of India (Trai) has recommended delicensing of a chunk of spectrum in a few bands.

Important recommendations made:

Allocation of spectrum: Spectrum allocation should be technology and service neutral and no separate spectrum band should be allocated exclusively for M2M services. However, in order to facilitate the smooth roll-out of M2M services utilising licence exempt spectrum, 1 MHz of spectrum at 868 MHz (867-868) and a chunk of 6 MHz of spectrum at 915-935 MHz is recommended to be delicensed. Delicensing the V-band (57-64 GHz) on various occasions may be done on priority.

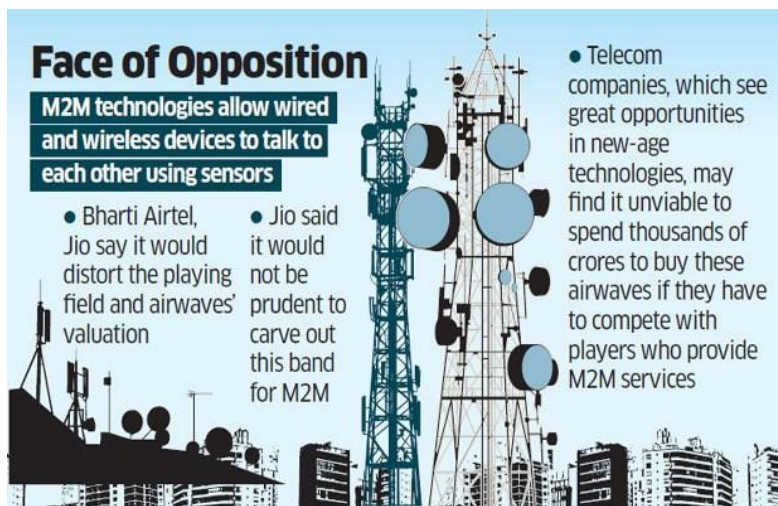
Composition of M2M apex body: Regulatory authorities whose sector would get impacted by M2M communications like Trai, Central Drugs Standard Control Organization, National Highways Authority of India, Inland Waterways Authority of India, Central Electricity Regulatory Commission etc and Ministry of Law and Justice should be members in M2M apex body formed by Department of Telecommunications (DoT).

Registration: M2M service providers should register with DoT and all access service providers and unified licence holders using licenced spectrum shall be allowed to provide M2M services. All unified licence virtual network operators shall be accordingly be allowed to provide M2M connectivity and DoT may amend the licence condition for the same.

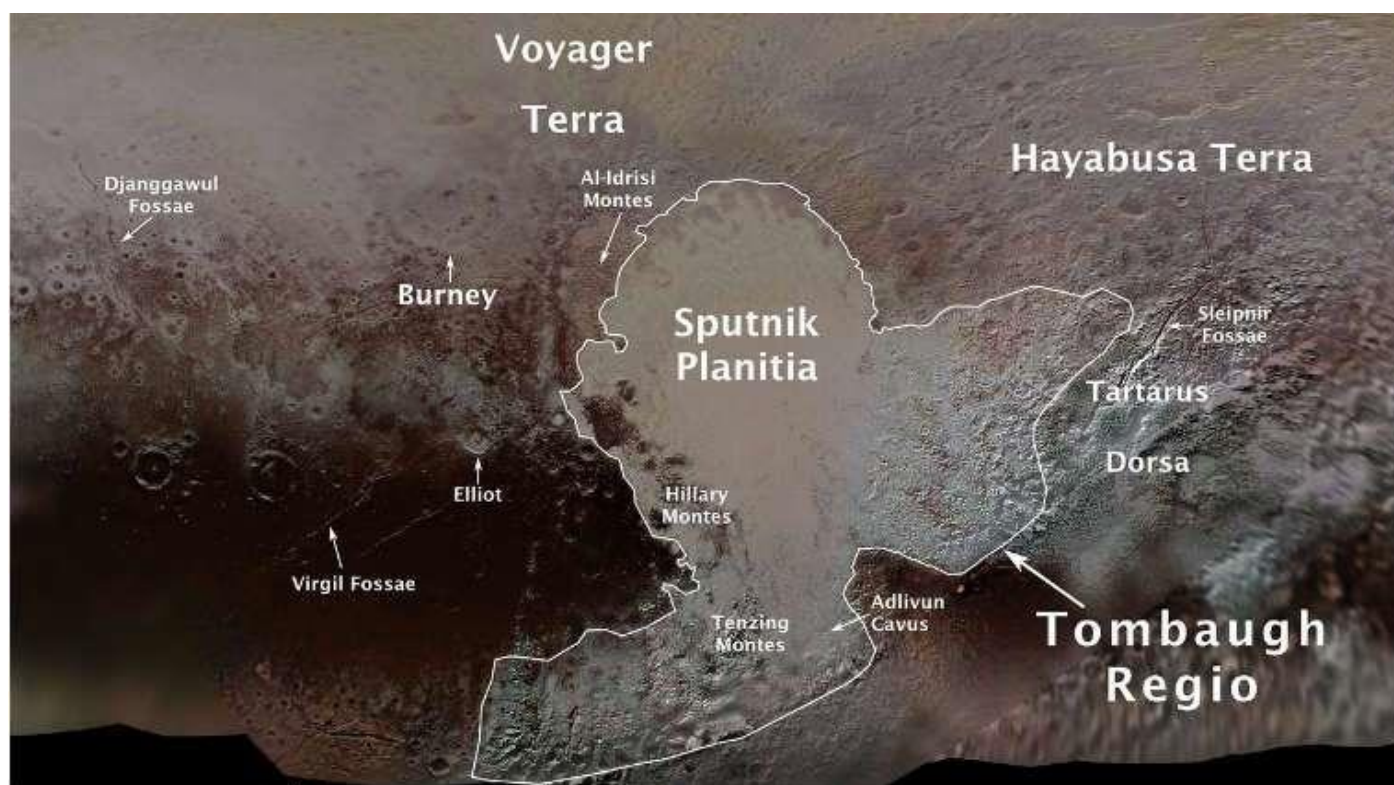
What is M2M?

M2M is the basis for automated information exchange between machines and can impact various industry verticals like smart city, smart grid, smart water, smart transportation, smart health etc. **The government has also recognized the potential of M2M and emphasized the same in National Telecom Policy 2012.**

Sources: the hindu.



Pluto mountains named after Tenzing Norgay, Edmund Hillary



Two mountain ranges on Pluto have been named after Tenzing Norgay and Edmund Hillary respectively by the International Astronomical Union, which for the first time, has officially approved the naming of 14 features on the icy dwarf planet. These are the first geological features on the planet to be named following the close flyby by the New Horizons spacecraft in July 2015.

Who are Tenzing Montes and Hillary Montes?

Tenzing Montes and Hillary Montes are mountain ranges honouring Tenzing Norgay (1914-1986) and Sir Edmund Hillary (1919-2008), the Indian/Nepali Sherpa and New Zealand mountaineer who were the first to reach the summit of Mount Everest and return safely.

Background:

NASA's New Horizons team proposed the names to the IAU following the first reconnaissance of Pluto and its moons by the New Horizons spacecraft. The names pay homage to the underworld mythology, pioneering space missions, historic pioneers who crossed new horizons in exploration, and scientists and engineers associated with Pluto and the Kuiper Belt. This is the first set of official names of surface features on Pluto to be approved by the Working Group for Planetary System Nomenclature of the International Astronomical Union (IAU), the internationally recognised authority for naming celestial bodies and their surface features.

About the IAU:

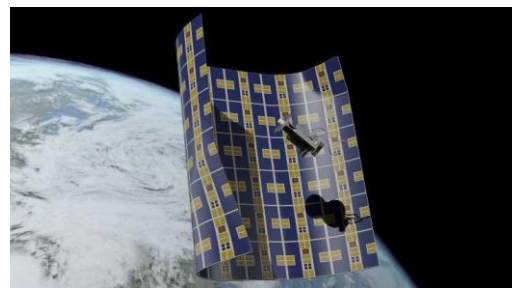
The International Astronomical Union (IAU) was founded in 1919. Its mission is **to promote and safeguard the science of astronomy in all its aspects through international cooperation**. Its individual members — structured into Divisions, Commissions, and Working Groups — are professional astronomers from all over the world, at the Ph.D. level and beyond, who are active in professional research and education in astronomy. The IAU has 12625 members.

Among other activities, it acts as the internationally recognized authority for assigning designations to celestial bodies (stars, planets, asteroids, etc.) and any surface features on them.

Sources: the hindu.

Ultra-thin craft may wrap and destroy space junk

Scientists are developing an ultra-thin spacecraft that can remove space debris – which potentially threaten satellites or astronauts – by enveloping junk in the Earth's orbit and dragging it through the atmosphere, causing it to burn up. **The Brane Craft, being developed by US-based Aerospace Corporation, is a flexible and less than half the thickness of a human hair.**



Key facts:

- The spacecraft is designed to be resilient. Its microprocessor and digital electronics are fabricated in a way to ensure that if one component gets damaged, the others will continue to work.
- The project received funding from the NASA Innovative Advanced Concepts programme, which focuses on space research that are in early stages.
- Brane Crafts will be powered by ultra-thin solar cells as well as a little bit of propellant.
- After each Brane envelops a piece of space junk, it will navigate back to towards Earth, causing the junk to burn up in the atmosphere.

The menace of space debris:

According to NASA, there are over 50,000 pieces of debris (space junk) traveling at speeds up to 17,500 mph around the Earth, the movements of which are being constantly monitored and tracked.

- The rising population of space debris increases the potential danger to all space vehicles, but especially to the International Space Station (ISS), space shuttles, satellites and other spacecraft.
- In December 2016, Japan sent H-II Transfer Vehicle Kounotori 6 (HTV6) into space to deliver supplies to the ISS. The same cargo ship was also supposed to complete another mission during its return journey – clean up space debris. However, the experimental Japanese probe failed in its mission to clear space junk from the Earth's orbit.

Incidents so far:

In 2013, Russian satellite, Blits, was damaged after colliding with debris created when China shot down an old weather satellite in 2007.

Sources: the hindu.

NASA's Cassini completes last flyby of Saturn's moon Titan

NASA's Cassini has completed a final, distant flyby of Saturn's giant moon Titan. This distant encounter is referred to informally as **"the goodbye kiss"** by mission engineers, because it provides a gravitational nudge that sends the spacecraft toward its dramatic ending in Saturn's upper atmosphere.

- With this, the spacecraft's mission is all set to when it enters the planet's atmosphere and disintegrates. In its final hours, Cassini will relay as much data as it can back to Earth before it dies. NASA hopes the data collected from the final descent will allow scientists to understand more about the planet's atmosphere and interior.

Background:

Launched in 1997, the Cassini mission — a cooperation between NASA, the European Space Agency and the Italian Space Agency — has sent back thousands of stunning images and made numerous discoveries about the ringed planet and its moons.

About Cassini Mission:

Cassini-Huygens is an unmanned spacecraft sent to the planet Saturn. Cassini is the fourth space probe to visit Saturn and the first to enter orbit. Its design includes a Saturn orbiter and a lander for the moon Titan. The lander, called Huygens, landed on Titan in 2005. The spacecraft was launched on October 15, 1997. This was the first landing ever accomplished in the outer Solar System.

Objectives:

- Determine the three-dimensional structure and dynamic behavior of the rings of Saturn.
- Determine the composition of the satellite surfaces and the geological history of each object.
- Determine the nature and origin of the dark material on Iapetus's leading hemisphere.
- Measure the three-dimensional structure and dynamic behavior of the magnetosphere.
- Study the dynamic behavior of Saturn's atmosphere at cloud level.
- Study the time variability of Titan's clouds and hazes.
- Characterize Titan's surface on a regional scale.

What has it discovered?

The probe has been crucial to findings that Saturn's moons are among the most hospitable places in the Solar System for potentially supporting life. Recently, Nasa also announced that Cassini had detected chemical reactions happening below the icy surface of Enceladus, suggesting life is possible there. The mission also found that the moon Titan contains many earth-like features such as wind, rain and seas.

Sources: et.

Fast spinning star confirms Indian Nobel Laureate's theory

Over 70 years after Indian astrophysicist and **Nobel laureate Subrahmanyan Chandrasekhar** predicted that rapidly rotating stars would emit polarised light, scientists in Australia have observed the phenomenon for the first time.

- Researchers from the University of New South Wales (UNSW) in Australia and University College London in the UK used a highly sensitive piece of equipment to detect the polarised light from Regulus, one of the brightest stars in the night sky.
- The equipment provided unprecedented insights into the star, which is in the constellation Leo, allowing the scientists to determine its rate of spinning and the orientation in space of the star's spin axis.

Background:

In 1946, Chandrasekhar predicted the emission of polarised light from the edges of stars, prompting the development of sensitive instruments called stellar polarimeters to try to detect this effect. In 1968, other researchers built on Chandrasekhar's work to predict that the distorted, or squashed, shape of a rapidly rotating star would lead to the emission of polarised light, but its detection has eluded astronomers until now.

Polarized light:

Optical polarisation is a measure of the orientation of the oscillations of a light beam to its direction of travel.

Sources: et.

Paper 3 Topic: *Conservation, environmental pollution and degradation, environmental impact assessment.*

Tigers to make a comeback in Buxa reserve

Buxa Tiger Reserve in West Bengal has been identified for **the tiger augmentation programme** by the National Tiger Conservation Authority (NTCA).

Where will tigers come from?

Tigers from the forest reserves of Assam, which have a similar flora and fauna, will be introduced in Buxa. The reserve is located very close to Assam's Manas Tiger Reserve, and some experts believe that animals from Manas often come to Buxa using Bhutan as a corridor.

What are the challenges?

Human habitation: The initial plan is to introduce six tigers at Buxa, but this poses a challenge to forest officials as there is human habitation in the area. The tiger reserve has an area of about 757.9 sq km, of which 390 sq km lies in the core area and 367 sq km in the buffer zone. There are about 38 villages in Buxa and 49 villages in the fringe area.

A number of tea gardens are located on the periphery of the reserve. The people residing in the villages mainly work at the tea plantations. In an attempt to mitigate the human versus animal conflict, the Forest Department has started awareness programmes in the villages before introducing the tigers.

Presence of broad gauge rail: Besides the population pressure, another major challenge at Buxa is the broad gauge rail line passing through the reserve, connecting Siliguri and Alipurduar. Over the past few years, a number of elephants and other animals have died, having been run over by trains.

About Buxa Tiger reserve:

Notified as a tiger reserve in 1983, Buxa consists of **moist, deciduous and evergreen forests**. It stretches to a length of 50 km from west to east and 35 km from north to south. **Northern boundary of Buxa Tiger Reserve runs along the international border with Bhutan. The Sinchula hill range lies all along the northern side of BTR** and the eastern boundary touches that of the Assam state.

The Phipsu Wildlife Sanctuary of Bhutan is contiguous to the north of BTR. Manas National Park lies on east of BTR. BTR, thus, serves as **international corridor for Asian elephant migration between India and Bhutan**.

Over the past few years, the number of tigers in the Buxa reserve has been hotly debated by wildlife enthusiasts. While Forest Department officials claimed there were tigers in the reserve, almost no sighting of the big cats raised questions about their presence. The survey of tigers in 2011 based on DNA analyses of scat put the number of tigers at 20.

Sources: the hindu.

Uninhabited Lakshadweep island Parali I vanishes, 4 others shrinking fast: study

A new study has revealed that one of Lakshadweep's bio-diversity rich islands Parali I has vanished. Parali I island, part of Bangaram atoll, which was 0.032 km² in 1968 has been eroded to an extent of 100%, resulting in its inundation. Additionally, four other territories in the sea are also shrinking.

Key facts:

A general trend in erosion has been noticed in almost all islands he studied. The magnitude of such events was higher in Parali group, evidenced by the complete erosion and inundation of the island Parali I. The magnitude of net erosion was higher in Parali I island (100%), which resulted in its inundation. Apart from Parali I, net erosion was higher in Parali II (80%), followed by Thinnakara (14.38%), Parali III (11.42%) and Bangaram (9.968%). The complete erosion and inundation of Parali I was pointing to the gravity of issues associated with coastal erosion within the atoll.

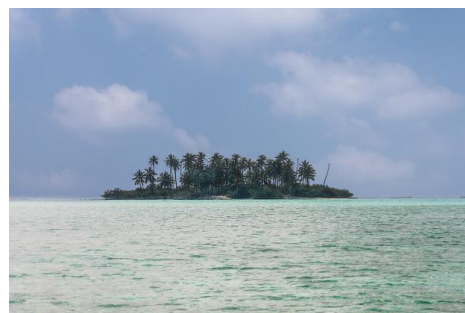
What needs to be done now?

The study said **the complete erosion and inundation of Parali I was pointing to the gravity of issues associated with coastal erosion within the atoll**. Therefore, the results are indicative of the urgent **measures to be implemented on each islet of the atoll to check further erosion**. It is recommended to check the **feasibility of a bio protection strategy using mangroves, in addition to the conventional physical protection measures**.

Way ahead:

It is now widely recognised that islands and coastal areas are going to get eroded and inundated due to rising sea levels because of increasing global temperature. India's coasts and islands, which are densely populated, are highly vulnerable. With the sea levels predicted to rise further, we should start preparing for building defenses to protect our coastlines and islands.

Sources: the hindu.



Uttarakhand ropes in HNB Garhwal University students to clean Ganga

Uttarakhand-based **Hemawati Nandan Bahuguna Garhwal University** has signed a **MoU with Namami Gange Project for Ganga Conservation**.

- Under Namami Gange project, the University will initiate activities like holding events, seminars and conferences to make strong pitch for public outreach and community participation.

Namami Gange Programme:

The Union government approved “Namami Gange” Program in May 2015. It integrates the efforts to clean and protect the Ganga River in a comprehensive manner.

Focus of the programme:

Among other things, the programme will focus on pollution abatement interventions namely Interception, diversion & treatment of wastewater flowing through the open drains through bio-remediation / appropriate in-situ treatment / use of innovative technologies.

Implementation:

- The program would be implemented by the National Mission for Clean Ganga (NMCG), and its state counterpart organizations i.e., State Program Management Groups (SPMGs).
- In order to improve implementation, a three-tier mechanism has been proposed for project monitoring comprising of a) High level task force chaired by Cabinet Secretary assisted by NMCG at national level, b) State level committee chaired by Chief Secretary assisted by SPMG at state level and c) District level committee chaired by the District Magistrate.
- The program emphasizes on improved coordination mechanisms between various Ministries/Agencies of Central and State governments.

What is rejuvenation?

According to the Namami Gange Mission, rejuvenation implies restoring the “wholesomeness” of the river and that includes three things: Aviral dhara (continuous flow), nirmal dhara (unpolluted flow) and ecological and geological integrity.

Sources: et.

“Wood is Good” Campaign

The government has launched “**Wood is Good**” Campaign under the Partnership for Land Use Science (Forest-Plus), a partnership between USAID and India’s environment ministry.

- The idea is **to promote wood as a climate-friendly resource and a substitute to materials like plastic and steel because it is carbon neutral unlike the others while leave a carbon footprint in their production.**

Forest plus:

The Partnership for Land Use Science (Forest-Plus) is a joint programme by the United States Agency for International Development (USAID) and Ministry of Environment, Forest and Climate Change (MoEF&CC) to strengthen capacity for REDD (Reducing Emissions from Deforestation and Forest Degradation) implementation in India. The programme brings together experts from India and the United States to develop technologies, tools and methods of forest management to meet the technical challenges of managing forests for the health of ecosystem, carbon stocks, biodiversity and livelihood.

Sources: pib.

Mouse deer released in Amrabad Reserve for the first time

In a novel and unique initiative attempted anywhere in the country, the Telangana State Forest Department has re-introduced the endangered ‘mouse deer’ into the forests of Nallamalla in Amrabad Tiger Reserve.

Key facts:

- The release of these mouse deer into the protected enclosure of 2.4 hectares is aimed at improving the biodiversity. The Amrabad Tiger Reserve was chosen because these animals were earlier wandering in this area.
- The deer will gradually be weaned-off externally supplied food. Afterwards if they get a clearing by the field biologists, they will be released from their enclosure into the wild.



About Mouse deer:

Also called 'spotted Chevrotain', it is one of the endangered species usually found in deciduous and evergreen forests of the country. It has its own family called Tragulidae.

- These animals are nocturnal in habitat and because of their small size they are called 'smallest ungulates' too.
- Also called "Jarini Pandi" in Telugu, their number has been decreasing at an alarming rate in recent years because of destruction of habitat and poaching.

Sources: the hindu.

Snow leopard no longer 'endangered'

The conservation status of snow leopard has been improved from "endangered" to "vulnerable". The decision was announced by the International Union for Conservation of Nature (IUCN) – the global standard for assessing extinction risk. The status change followed a three-year assessment process by five international experts.



- However, experts have warned that the species still faces serious threats from poaching and habitat destruction.
- The elegant yet elusive creatures, which live in the mountains of central Asia, were first listed as endangered by the IUCN in 1972.

Endangered Vs Vulnerable:

- To be considered 'endangered,' there must be fewer than 2,500 mature snow leopards and they must be experiencing a high rate of decline.
- Being classed as "vulnerable" means a species has under 10,000 breeding animals left, with a population decline of at least 10% over three generations.

Snow leopard stats:

- The rarely-sighted cats live in the craggy peaks of central Asia – including the Himalayas, and Russia's remote Altai mountains.
- Their habitat covers more than 1.8 million sq km / 694,980 sq miles, across 12 countries.
- Scientists say they are threatened by poaching for their fur, infrastructure developments, and climate change.
- Usually found at elevations of 3,000-4,500m (11,480-14,760ft).
- Solitary creatures, they usually hunt at dawn and dusk and are able to kill prey up to three times their own weight.
- Mostly feed on wild animals, but will also prey on livestock.
- Their spotted coats change with the seasons – from a thick, white fur to keep them warm and camouflaged in winter, to a fine yellow-grey coat in summer.

Sources: the hindu.

30th Anniversary of Montreal protocol and 23rd World Ozone Day Celebrated

30th Anniversary of Montreal protocol and 23rd World Ozone Day was celebrated on September 16th across the country.

Theme – "Caring for all life under the Sun".

World Ozone Day:

Every year, on September 16, the World celebrates the International day for the preservation of Ozone layer as the World Ozone Day. During the United Nations convention in Vienna for the Montreal Protocol, the General Assembly declared September 16 as the World Ozone day in order to remind the world of the depleting ozone layer. The first ozone hole was discovered 30 years ago in May 1985 over Antarctica.

What you need to know about the Ozone layer:

The ozone layer absorbs most of the Sun's ultraviolet light which is harmful to human life and other life forms. The layer absorbs about 97 to 99% of ultraviolet rays and maintain the ozone-oxygen cycle. Dobson unit is a unit which is used to measure the ozone in the atmosphere at a standard temperature and pressure.

MONTREAL PROTOCOL:

The Montreal Protocol is one of the most successful global environmental treaties, the implementation of which has not only led to the phase-out of around 98% of ozone depleting chemicals, but also averted more than 135 billion tonnes of carbon dioxide equivalent emissions. Nearly 2 million cases of skin cancer per year have been averted globally. The Montreal Protocol is the only environmental treaty which enjoys universal ratification of 197 UN member countries.

Sources: pib.

A 'Boat Lab' to study Brahmaputra

The Centre plans to safeguard the fast-eroding Majuli island — Asia's largest riverine island — using research carried out on floating 'B4' boat labs along the Brahmaputra river.

Key facts:

- **'B4' – the 'Brahmaputra Biodiversity and Biology Boat'**, work on which will commence by December, will initially cover the region from Pasighat, Dibrigargh, Neemati, Tejpur and Guwahati in the state of Assam, said officials at the Department of Biotechnology. The department has set aside Rs. 50 crore as an initial investment on the project.
- The large barge (or boat) which will be set up on the river will be a "well-equipped laboratory" with cold storage facilities for holding samples, along with multiple satellite boats or rafts that will venture into shallower and narrower parts of the river to lift samples.
- The large boat with the permanent lab will be spread over two floors and will go up and down the river. One floor will be dedicated to scientists, while the other floor will be accessible to residents of the area to learn about the eco-system. The idea is to study the changes caused by dams, climate change, human interventions and the eventual effects it has on the river eco-system.
- The project will "constantly monitor" the impact of various environmental and anthropological factors that affect the river and conduct research to mitigate the effects.
- The interdisciplinary focus, the work plan for which is developed with IIT Guwahati as the nodal agency, will also aim at a thorough study of freshwater resources of North East India. The integrated approach is aimed to combine data, science and judgement that can impact policy.

Background:

Majuli, the first island district of the country, was once 1200 square kilometres but due to excessive erosion has since shrunk to under 500 square kilometres. It is also known for being the seat of Assam's Vaishnava monasteries. Despite supporting considerable biodiversity, the Brahmaputra has not been studied as extensively as the Amazon.

Sources: the hindu.

Western Ghats throw up a new snake

Scientists have described a **new species of non-venomous endemic snake, *Aquatic Rhabdops***, from the northern Western Ghats.



About Aquatic Rhabdops:

- Rhabdops aquaticus, was till now considered a variant of the Olive Forest Snake, first described in 1863. However, the new study confirms that the Aquatic Rhabdops is a different one: they sport not only different colours and patterns, but also vary in other features of size, shape and structure, and also genetic make-up.
- **The adults are mostly associated with freshwater forest streams and juveniles are seen in water-logged areas,** mostly on rocky plateaus. The **nocturnal** snake hunts for prey underwater.
- While adults of the Aquatic Rhabdops have off-white bellies and black spots on their olive brown skin, juveniles are olive green, with yellow undersides. This colour difference in life stages could possibly be due to the different local habitats.
- The Aquatic Rhabdops is **found only in the laterite plateaus of the northern Western Ghats in Goa, southern Maharashtra and northern Karnataka**, in areas facing severe human pressures.

Sources: the hindu.

Centre notifies wetland rules

In a major decision, the union environment ministry notified **the new Wetland (Conservation and Management) Rules 2017** which prohibit a range of activities in wetlands like setting up and expansion of industries, waste dumping and discharge of effluents.

Key facts:

The new rules will replace the 2010 version of the rules.

- The new rules stipulate setting up of a State Wetlands Authority in each State and union territories that will be headed by the State's environment minister and include a range of government officials. They will also include one expert each in the fields of wetland ecology, hydrology, fisheries, landscape planning and socioeconomics to be nominated by the state government.
- These authorities will need to develop a comprehensive list of activities to be regulated and permitted within the notified wetlands and their zone of influence, recommend additional prohibited activities for specific wetlands, define strategies for conservation and wise use of wetlands, and undertake measures for enhancing awareness within stakeholders and local communities on values and functions of wetlands. Wise use is defined as the principle of sustainable uses that is compatible with conservation.
- The State authorities will also need to prepare a list of all wetlands of the State or union territory within three months, a list of wetlands to be notified within six months, a comprehensive digital inventory of all wetlands within one year which will be updated every ten years.
- The rules prohibit activities like conversion of wetland for non-wetland uses including encroachment of any kind, setting up of any industry and expansion of existing industries, manufacture or handling or storage or disposal of hazardous substances and construction and demolition waste, solid waste dumping, discharge of untreated wastes and effluents from industries, cities, towns, villages and other human settlements.

Why are few environmentalists not happy with these rules?

The new Wetland Rules have laudable objectives. However, it falls short in details. At the outset, the identification process by the State Wetland Authority does not distinguish between existing wetlands and especially those past wetlands which have been encroached and can be proved through legal documents.

- It also does not take into account the Jagpal Singh judgment of Justice Katju for restoration of encroached wetlands throughout the country.
- Provisions like "central government may consider proposals from the state government or union territory administration for omitting any of the (prohibited) activities on the recommendation of the authority" in the new rules can be misused.
- Another major objection is about the process of appeal against the decisions of wetland authorities. According to the 2010 rules, anyone aggrieved with the CWRA's decisions could have filed an appeal with the National Green Tribunal, but the new 2017 rules are silent on the appeal process.

- The other big gap is the subjective definition of “wise use” which is to be determined by the state wetland authority. While the subject head talks about restrictions and the activities listed are to be prohibited, the provision gives ample space for undoing everything that ought to be prohibited.

What are wetlands?

Wetlands can be defined as lands transitional between terrestrial and aquatic eco-systems where the water table is usually at or near the surface or the land is covered by shallow water. They support rich biodiversity and provide wide range of ecosystem services such as water storage, water purification, flood mitigation, erosion control, aquifer recharge and others.

- But they are threatened by reclamation and degradation due to activities like drainage and landfill, pollution, hydrological alteration (water withdrawal and changes in inflow and outflow), over-exploitation resulting in loss of biodiversity and disruption in ecosystem services provided by them.
- There are at least 115 wetlands that are officially identified by the central government and of those 26 are identified as wetlands of international importance under Ramsar Convention which is an international intergovernmental treaty for conservation of wetlands. India is a party to the treaty.

Sources: et.

Paper 3 Topic: Disaster and disaster management.

Workshop on implementation of Emergency Action Plan for Dams held

With the purpose of increasing awareness about dam safety measures in the country and finalisation of Emergency Action Plan (EAP) a stakeholders consultation Workshop was recently organised by Tamil Nadu Water Resources Department in collaboration with Central Water Commission. Delegates representing the stakeholders involved with relief and rescue operations and representatives from National Disaster Management Authority, State Disaster Management Authority, India Meteorological Department, State Health, Fire, Police, Revenue and Road Departments and Railways participated in the Workshop.

- Need for the preparation of EAP for each dam and involvement of all agencies in ensuring effective relief and rescue operations was highlighted during the meeting.

Background:

India ranks third globally with 5254 large dams in operation and 447 large dams under construction. About 4% of these large dams (209) are over 100 years old and about 17% (876 dams) are more than 50 years old. Many of these dams are facing varying degrees of inadequacies in meeting the current standards of dam health and safety due to various reasons.

What's being done in this regard?

The ongoing Dam Rehabilitation and Improvement Project (DRIP) under the Ministry of Water Resources, River Development and Ganga Rejuvenation is facilitating the rehabilitation of about 198 large dam projects in seven States, in addition to the institutional strengthening of the implementing agencies for sustainable dam safety initiatives.

About DRIP:

DRIP is a project involving 9 implementing agencies (IAs) across seven states of India (Kerala, Madhya Pradesh, Orissa, Tamil Nadu, Karnataka, Uttarakhand, and Jharkhand) and targets rehabilitation of about 225 dam projects across the country.

Way ahead:

Even though our dams are quite safe, in the rare event of a dam failure, extensive damage to property, environment and sometimes loss of life occurs. Managing the exigencies caused by a failure of a dam requires coordinated efforts of all national and States agencies. The preparation of Emergency Action Plan (EAP) for all DRIP dams is one of the important activities under DRIP. This document defines clear roles for all concern agencies as well as Standard Operating Protocols during various stage of exigencies, as well as contains all technical details about the flood waves moving downstream affecting the downstream habitation.

Sources: pib.

Multi-Agency Exercise 'Pralay Sahayam'

A multi-agency exercise was recently conducted on the banks of Hussain Sagar Lake as the final event of 'Pralay Sahayam' in Hyderabad.

- The event demonstrated efforts of all central and state agencies, National Disaster Relief Force (NDRF) and the Armed Forces towards jointly tackling an urban flooding scenario in Hyderabad.

Key facts:

- The exercise brought out the role and function of the State Emergency Operations in coordinating conduct of the joint operations.
- The exercise emphasized the significance of early warning systems of agencies like Indian Meteorological Department (IMD), National Remote Sensing Centre (NRSC) and Indian National Centre for Ocean Information Services (INCOIS).
- The exercise culminated with a static display which demonstrated the efficient and functional layout of a relief and rehabilitation camp for the displaced persons.

About NDRF:

The Disaster Management Act has made the statutory provisions for constitution of National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters.

Background:

Two national calamities in quick succession in the form of Orissa Super Cyclone (1999) and Gujarat Earthquake (2001) brought about the realization of the need of having a specialist response mechanism at National Level to effectively respond to disasters. This realization led to the enactment of the DM Act on 26 Dec 2005.

ROLE AND MANDATE OF NDRF:

- Specialized response during disasters.
- Proactive deployment during impending disaster situations.
- Acquire and continually upgrade its own training and skills.
- Liaison, Reconnaissance, Rehearsals and Mock Drills.
- Impart basic and operational level training to State Response Forces (Police, Civil Defence and Home Guards).
- Community Capacity Building Programme.
- Organize Public Awareness Campaigns.

Sources: pib.

In a first, govt to run safety checks on 5,000 big dams

For the first time, the Centre is planning to conduct a 'break analysis' of 5,247 large dams across the country, and put in place an emergency action plan, especially for the 196 that are over 100 years old.

What is Break Analysis?

Break analysis is the examination of dams to identify potential failures that may result in an uncontrolled release of water. It involves the characterisation of threats to public safety that a dam poses.

Need for safety checks:

There are two safety issues: the risk of breach and floods, and the decreasing ability to hold as much water as the original capacity (which means less live storage and per capita availability of water). These concerns make maintenance more critical for dams, though not all are in a dilapidated condition or in need of immediate repair.



Various efforts in this regard:

The government has already drafted a **'dam safety bill'**, currently being reworked by the Niti Aayog.

- Previously, in October 1987, **the Centre had constituted the National Committee on Dam Safety (NCDS)**, which was tasked with overseeing dam safety and suggesting improvements. The committee, headed by the Central Water Commission chairman, met 37 times and has been instrumental in the maintenance of dams.
- **A project called DRIP (Dam Rehabilitation and Improvement Programme)** is also under way. DRIP, started in April 2012 and has been working with five state governments (Karnataka, Tamil Nadu, Kerala, Madhya Pradesh and Odisha) and two agencies (Damodar Valley Corporation in Jharkhand and Uttarakhand Jal Vidyut Nigam Ltd), was conceived with an estimated budget of Rs 2,100 crore.

Sources: et.

13th Formation Day of NDMA

The National Disaster Management Authority (NDMA) recently celebrated its 13th formation day. **The theme of this year's Formation Day is School Safety.**

About NDMA:

On 23 December 2005, the Government of India enacted the Disaster Management Act, which envisaged **the creation of National Disaster Management Authority (NDMA), headed by the Prime Minister, and State Disaster Management Authorities (SDMAs) headed by respective Chief Ministers**, to spearhead and implement a holistic and integrated approach to Disaster Management in India.

NDMA, as the apex body, is mandated to lay down the policies, plans and guidelines for Disaster Management to ensure timely and effective response to disasters. Towards this, it has the following responsibilities:

- Lay down policies on disaster management.
- Approve the National Plan.
- Approve plans prepared by the Ministries or Departments of the Government of India in accordance with the National Plan.
- Lay down guidelines to be followed by the State Authorities in drawing up the State Plan.
- Lay down guidelines to be followed by the different Ministries or Departments of the Government of India for the Purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects.
- Coordinate the enforcement and implementation of the policy and plans for disaster management.
- Recommend provision of funds for the purpose of mitigation.
- Provide such support to other countries affected by major disasters as may be determined by the Central Government.
- Take such other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealing with threatening disaster situations or disasters as it may consider necessary.
- Lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management.

Way ahead:

There was no institutional framework for disaster management earlier, but after the setting up of NDMA, a mechanism has been developed not only for disaster management, but also for disaster risk reduction.

- India got appreciation due to NDMA's work at Shanghai Cooperation Organisation (SCO) meeting on Disaster management held in Kyrgyzstan last month. India had extended help to earthquake-hit Nepal in 2014 and also India had sent NDRF team to Japan for help.
- Its time to further strengthen the legal and institutional systems in place for disaster management.

Sources: the hindu.

Paper 3 Topic: Security challenges and their management in border areas; linkages of organized crime with terrorism.

India and China need to demarcate LAC

The Doklam standoff and the subsequent clash between Indian and Chinese troops in Ladakh has made it necessary for takeaways and ironing out of issues by the militaries on both sides, being the primary stakeholders in such matters.

What's the issue?

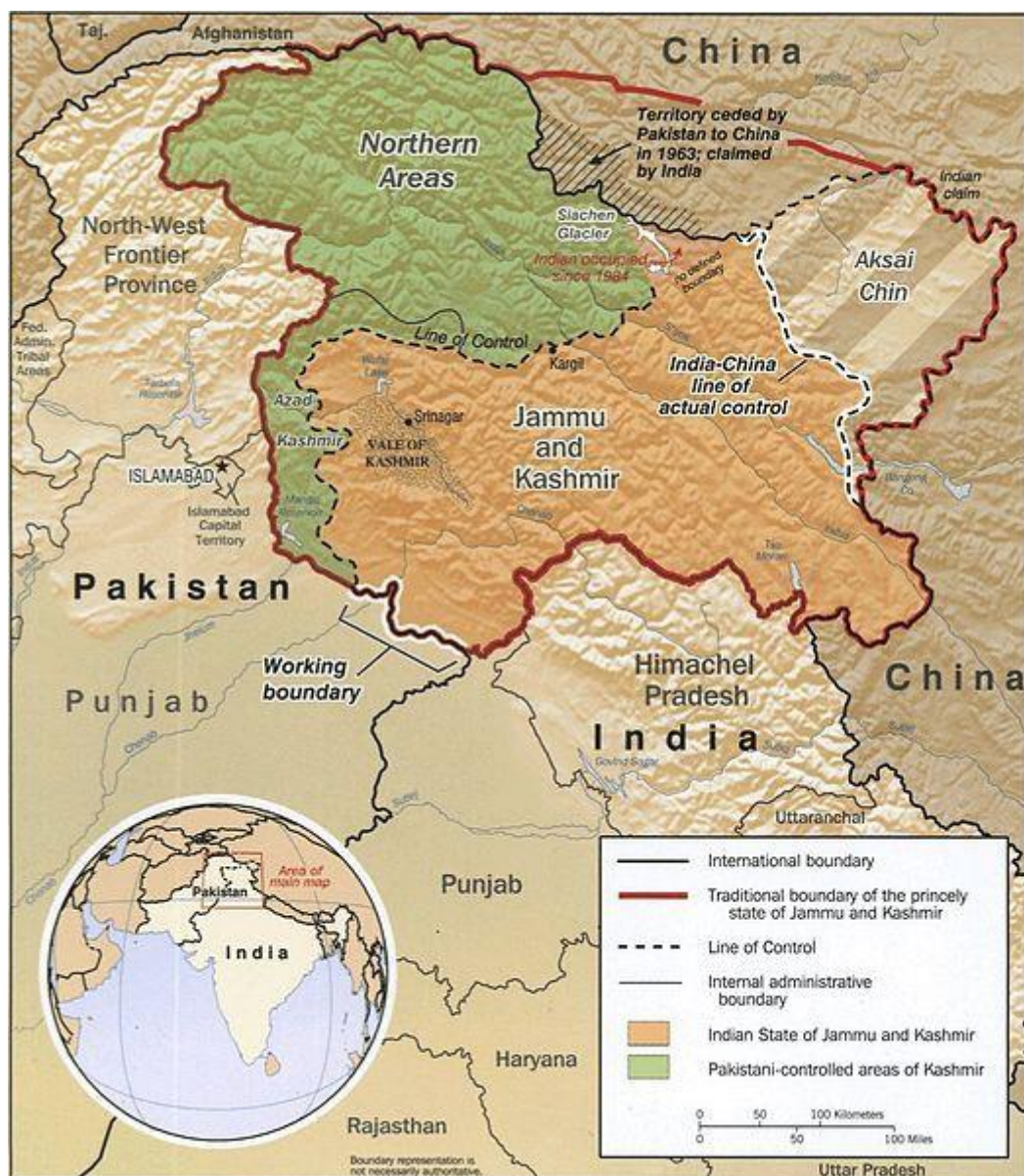
The LAC, starting from northwest of the Karakoram pass and ending at Arunachal Pradesh, has not been demarcated and is virtually passed on by word of mouth. This has led to differing perceptions regarding the alignment, with China making territorial claims in at least eight areas.

- These are those areas where regular incursions and face-offs take place. They include Asaphila, Longju, Namka Chu, Sumdorong Chu, and Yangste in Arunachal Pradesh, Barahoti in Uttarakhand, and Aksai China and Demchok in Ladakh.
- Even areas along the banks of the Pangong Lake in Ladakh, where a clash between Indian and Chinese troops took place on August 15, are under dispute. The LAC passes through the lake, but India and China do not agree on its exact location. The mountains sloping on the banks of the lake form finger-like structures.

What needs to be done?

The Line of Actual Control (LAC) has to be properly demarcated and simultaneously confidence building measures (CBMs) have to be conducted, military experts said. More points of contact, including regular meetings and setting up of a hotline between the two militaries, have to be created to prevent future transgressions, incursions and face-offs.

Sources: et.



Refugees go to SC against Article 35A

Some refugees from West Pakistan, who had migrated to India during Partition, have moved the Supreme Court challenging Article 35A of the Constitution relating to special rights and privileges of permanent residents of Jammu and Kashmir.

What's the issue?

Nearly 1.25 lakh WPRs, who migrated from the then West Pakistan after partition of the country in 1947 to settle in Kathua, Samba and Jammu districts of the state, are seeking citizenship rights, employment rights and right to vote and contest the state assembly polls for the past 70 years.

- According to official data 5,764 families comprising 47,915 persons had migrated from West Pakistan in 1947 and settled in the three districts of the state. Today their population increased to nearly 1.25 lakh.
- These refugees are not considered permanent residents of the state, cannot vote in assembly polls and cannot do state government jobs even though they are living in the state for generations. However, they can vote in parliamentary elections.

What you need to know about Article 35A?

It was added through the Constitution (Application to Jammu and Kashmir) Order, 1954, issued under Article 370. **Article 35A protects certain provisions of the J&K Constitution which denies property rights to native women who marry from outside the State. The denial of these rights extend to her children also.**

Article 35A also empowers the State's legislature to frame any law without attracting a challenge on grounds of violating the Right to Equality of people from other States or any other right under the Constitution.

Concerns:

Attempts to undo Article 35A of the Indian Constitution would strike a fatal blow to the nationalists in the state. There is an ongoing case in the Supreme Court challenging the validity of the Article, which prevents non-J&K state subjects from settling and buying property in the state. However, Kashmiris are apprehensive that such a move would open the sluice gates for a demographic transformation of the Valley.

Sources: the hindu.

Sir Creek is very important for national security: Nirmala Sitharaman

The resolution to the Sir Creek dispute has been considered a low-hanging fruit for sometime now. The demarcation of the 96 km strip of water in the Rann of Kutch marshlands was one of the factors that contributed to the 1965 India-Pakistan war. Therefore, Defence Minister Nirmala Sitharaman recently said that Sir Creek, located on the Gujarat border with Pakistan, is a "very important place" for national security, particularly Gujarat's security.

- India and Pakistan have discussed about the land boundary in the Sir Creek area and also delimitation of International Maritime Boundary between India and Pakistan. They have expressed their desire to find an amicable solution of the Sir Creek issue through sustained and result-oriented dialogue.

What is Sir Creek?

Sir Creek is a 96-km strip of water disputed between India and Pakistan in the Rann of Kutch marshlands. Originally named Ban Ganga, Sir Creek is named after a British representative. The Creek opens up in the Arabian Sea and roughly divides the Kutch region of Gujarat from the Sindh Province of Pakistan.

What's the dispute?

The dispute lies in the interpretation of the maritime boundary line between Kutch and Sindh. Before India's independence, the provincial region was a part of the Bombay Presidency of British India. But after India's independence in 1947, Sindh became a part of Pakistan while Kutch remained a part of India.

Pakistan claims the entire creek as per paragraphs 9 and 10 of the Bombay Government Resolution of 1914 signed between then the Government of Sindh and Rao Maharaj of Kutch. The resolution, which demarcated the boundaries between the two territories, included the creek as part of Sindh, thus setting the boundary as the eastern flank of the creek popularly known as Green Line. But India claims that the boundary lies mid-channel as depicted in another map drawn in 1925, and implemented by the installation of mid-channel pillars back in 1924.

What's the importance of Sir Creek?

Apart from strategic location, Sir Creek's core importance is fishing resources. Sir Creek is considered to be among the largest fishing grounds in Asia.

Another vital reason for two countries locking horns over this creek is the possible presence of great oil and gas concentration under the sea, which are currently unexploited thanks to the impending deadlock on the issue.

Home Ministry team to study risks faced by border villages

The home ministry will set up an expert group to look into the problems people living in villages along the Line of Control (LoC) face. The study group will look at ways to improve lives of cross-border ceasefire violation victims.

- The study group is expected to come up with suggestions to not only increase the safety and security of the border residents but also to look at ways of making funding in Border Area Development Programmes effective.



Background:

In 2011, there were 62 ceasefire violations by Pakistan. There were 114 of those in 2012 and 347 in 2013. In 2014, the number of cross-fire violations went up to 583. It was 405 in 2015 and 449 in 2016. In 2017, till August, there have been 418 ceasefire violations by Pakistan, according to numbers in the home ministry.

Concerns:

Many people have abandoned their home and have been living in relief camps for the last four months to escape firing and shelling from across the border. Lives of the people who faced such frequent firing are fraught with risks and more is needed to be done.

Sources: et.

India will soon grant citizenship to Chakma, Hajong refugees

The Centre will soon grant citizenship to nearly one lakh Chakma and Hajong refugees, who came from the erstwhile East Pakistan five decades ago and are living in camps in the northeast.

- In 2015, the Supreme Court had directed the Central government to grant citizenship to the Chakma and Hajong refugees, mostly staying in Arunachal Pradesh.

Who are they?

Chakmas and Hajongs were originally residents of Chittagong Hill Tracts in the erstwhile East Pakistan. They left their homeland when it was submerged by the Kaptai dam project in the 1960s.

- The Chakmas, who are Buddhists, and the Hajongs, who are Hindus, also allegedly faced religious persecution and entered India through the then Lushai Hills district of Assam (now Mizoram). The Centre moved the majority of them to the North East Frontier Agency (NEFA), which is now Arunachal Pradesh.
- Their numbers have gone up from about 5,000 in 1964-69 to one lakh. At present, they don't have citizenship and land rights but are provided basic amenities by the state government.

Way ahead:

Several organisations and civil society in Arunachal Pradesh have been opposing citizenship to the refugees saying it would change the demography of the state. The Centre is trying to find a workable solution to the issue by proposing that Chakma and Hajong refugees will not be given rights, including ownership of land, enjoyed by Scheduled Tribes in Arunachal Pradesh. However, they may be given Inner Line permits, required for non-locals in Arunachal Pradesh to travel and work.

Sources: the hindu.

BSF, ITBP chiefs stress on need for technology in border management

Highlighting the role of technology for better border management, the chiefs of the Border Security Force and the Indo-Tibetan Border Police have said that sealing the border with Pakistan using smart technology- aided fence will be in place by December next year.

CIBMS:

At the moment, BSF is working on a **Comprehensive Integrated Border Management System (CIBMS)** which will be deployed along the International Border with Pakistan. CIBMS is expected to counter infiltration and cross-border terror attacks. The system employs latest technology which would detect infiltration via land, underwater, air and tunnels.

The concept of CIBMS is the integration of manpower, sensors and command and control to improve situational awareness and facilitate quick response to emerging situations. Among major components of CIBMS is the 'virtual fence'. The second component is the command and control, which will help in optimum use of resources for border management. Another component is power management to keep CIBMS running.

Security challenges on coasts:

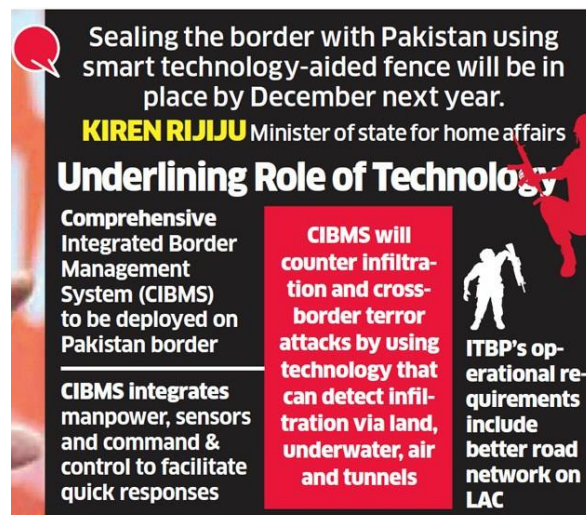
India's long coastline presents a variety of security challenges including illegal landing of arms and explosives at isolated spots on the coast, infiltration/ex- filtration of anti-national elements, use of the sea and off shore islands for criminal activities, smuggling of consumer and intermediate goods through sea routes etc. Absence of physical barriers on the coast and presence of vital industrial and defence installations near the coast also enhance the vulnerability of the coasts to illegal cross border activities.

Way ahead:

Smart borders on one hand should allow seamless movement of authorized people and goods, while on the other, minimise cross-border security challenges using innovation and technology enablement. Over the long term, smart border management will also have to incorporate systems that digitally monitor patterns of activity through and around border areas to root out organised crime and anti-national events.

There is also a need to revisit the policies on border management to ensure that the frontier regions grow in step with the rest of the country.

Sources: et.



Hasina floats five-point peace plan

Bangladesh Prime Minister Sheikh Hasina has floated a five-point proposal at the United Nations to find a permanent solution to the Rohingya crisis. She also called for immediate steps to end the 'cleansing' of the ethnic Rohingya minority.

Hasina's five-point proposal says:

- Myanmar must stop the violence and the practice of ethnic cleansing in the Rakhine State unconditionally, immediately and forever.
- The UN Secretary General should immediately send a fact-finding mission to Myanmar.
- All civilians, irrespective of religion and ethnicity, must be protected in Myanmar. For this, 'safe zones' could be created inside Myanmar under UN supervision.
- Sustainable return of all forcibly displaced Rohingyas in Bangladesh to their homes in Myanmar must be ensured.
- The recommendations of the Kofi Annan Commission Report must be implemented immediately, unconditionally and entirely.

What's the issue?

Few years ago, religious and ethnic tensions between the Rohingya Muslims and the Rakhine Buddhists (who make up the majority of the population in Myanmar) escalated into widespread, deadly rioting. Hundreds of thousands were forced to flee. Since then, ongoing violent attacks have forced even more people to leave their homes.

- The Myanmar Government says that Rohingya people are not Burmese citizens – but the Rohingya have been living in Myanmar for generations. Today, they are a people with no home or citizenship.
- Rohingya people are being widely abused and exploited. They are one of the most persecuted minorities in the world.
- Hundreds of thousands of Rohingya from the Rakhine State are entering Bangladesh to flee violence. As estimated by IOM (International Organisation for Migration), in last three weeks, over 430,000 Rohingya entered Bangladesh. They are fleeing 'ethnic cleansing' in their own country where they have been living for centuries.

Sources: the hindu.

INS Tarasa

INS Tarasa, a Water Jet Fast Attack Craft was recently commissioned into the Indian Navy.

Key facts:

- INS Tarasa is the fourth and last of the follow-on Water Jet FAC's built by the Garden Reach Shipbuilders and Engineers (GRSE), Kolkata. The first two ships of the class i.e. IN ships Tarmugli and Tihayu were commissioned in 2016 and the third ship INS Tillanchang was commissioned earlier this year.
- The ship is an ideal platform for missions like coastal and off-shore surveillance, EEZ Patrol, law enforcement as well as non-military missions such as Search and Rescue, Humanitarian Assistance and Disaster Relief.
- This is the second ship of the Indian Navy to be named INS Tarasa. The first INS Tarasa was in service of the Navy from 1999 to 2014. She was gifted to Seychelles Coast Guard as a symbol of India's partnership with friendly maritime nation in IOR. The new INS Tarasa will be based at Mumbai under the operational control of Western Naval Command.
- The ship is of proven design, has good endurance, low draught, high speed and manoeuvrability, thus making her most suited for her primary role of extended coastal and offshore surveillance and patrol.



Sources: pib.

Paper 3 Topic: *Various Security forces and agencies and their mandate.*

Sashastra Seema Bal to get intelligence wing

The Union Ministry of Home Affairs has launched the SSB's first ever intelligence wing. The intelligence wing have 650 field and staff agents to gather actionable information.

Need for a separate intelligence wing:

The SSB has been mandated to guard the Indo-Nepal and Indo-Bhutan borders where there are no restrictions on the movement of people on either side. These borders are often used by criminals and Kashmiri militants returning from Pakistan. India shares a 1,751-km-long border with Nepal and a 699 -km-long border with Bhutan.



- The SSB has also been declared as the lead intelligence agency for both the borders. Thus, the central government felt that a well-knit intelligence network of the highest capability that can function and deliver would be the prime requirement for comprehensive border management.

- This was also essential as the SSB's operations are based on intelligence to prevent criminals and smugglers from taking advantage of the friendly borders with Nepal and Bhutan.

Facts for Prelims: The border with Nepal touches Uttarakhand, Uttar Pradesh, Bihar, West Bengal and Sikkim and the border with Bhutan touches Sikkim, West Bengal, Assam and Arunachal Pradesh.

What is the Sashastra Seema Bal?

The Sashastra Seema Bal (SSB) is a paramilitary police force under the Ministry of Home affairs responsible for guarding India's international borders with Nepal and Bhutan. It is one of India's Central Armed Police Forces, which includes ITBP, BSF, CRPF and CISF. When it was created in 1963, it was called Special Services Bureau. The name was changed to Sashastra Seema Bal in 2001 after it was given charge of the Nepal border. Besides this, the force is also deployed in Jammu and Kashmir for counter insurgency operations and anti-Naxal operations in Chhattisgarh, Jharkhand and Bihar. It also provides internal security during elections in various states.

What is the primary role of the SSB?

- It's primary role is to physically guard and manage the international border thereby promoting a sense of security and pride amongst the local border population.
- SSB is the lead intelligence unit for Nepal and Bhutan borders and the coordination agency for national security activities.
- Besides this, SSB undertakes construction of schools, buildings, toilets, roads under border area developmental plan.
- It also gives regular guidance and training to unemployed youth in general studies and physical training.
- In border villages, SSB teaches the border population the best agricultural practices, horticulture, pisciculture etc.
- SSB has also taken up a unique and important task to adopt and fund the education of the girl child in poor villages along the border and teach them unarmed combat training. This is done to eliminate rampant human trafficking of women across the border.

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.*

Rohingya children to get UNHCR cards in Bengal

The West Bengal government will distribute identity cards issued by the United Nations High Commissioner for Refugees (UNHCR) to Rohingya children lodged in the juvenile justice homes of the State.

- The move comes at a time when there are reports that the Union government is planning to deport Rohingyas refugees.

Background:

The UNHCR has issued identity cards to the Rohingyas in India so as to shield them from harassment and arbitrary arrests. The UNHCR says some 16,500 Rohingya from Myanmar are registered with it in India.

About UNHCR cards:

The UNHCR issues ID cards to registered refugees and documents to asylum-seekers which help to prevent arbitrary arrests, detention and deportation. The card includes a number of enhanced security features including 3D holograms, bar codes and a large QR code. The card is supported by enhanced biometric data collection at the UNHCR office, including retina, 10 fingers and face scan.

Significance of these cards:

The government issues long-term visas to refugees which ease their access to public services and employment in the private sector. Because of some recent changes to the documentation processes, some refugees have reportedly been facing challenges in accessing public services and opening bank accounts. It is important for refugees to have access to employment and basic services. Therefore, refugee cards help in facilitating their access to these services.

Sources: the hindu.

CERT-In issues alert on 'Locky Ransomware'

The Indian Computer Emergency Response Team (CERT-In) has issued an alert about spread of a new malicious software 'Locky', which is being circulated through spam messages that can potentially lock computers and demand ransom for restoring access to users.

- Locky Ransomware is learnt to be demanding ransom of half bitcoin, which at present rate is equivalent to over Rs 1.5 lakh. To target users spam e-mails showing links to fake websites is being used to spread Locky variants.

Concerns:

While the impact of this ransomware on Indian systems is not clear so far, this could be the third major ransomware attack this year after Wannacry and Petya that crippled thousands of computers, including those of multinational corporations. In fact, according to an ASSOCHAM PWC study, India was the third worst affected country in a list of over 100 countries hit by Wannacry in May.

About CERT-In:

What is it?

CERT-In (the Indian Computer Emergency Response Team) is a government-mandated information technology (IT) security organization. CERT-In was created by the Indian Department of Information Technology in 2004 and operates under the auspices of that department.

It's purpose:

- The purpose of CERT-In is to respond to computer security incidents, report on vulnerabilities and promote effective IT security practices throughout the country.
- According to the provisions of the Information Technology Amendment Act 2008, CERT-In is responsible for overseeing administration of the Act.

Sources: the hindu.

RBI is not comfortable with bitcoins, says Sen

The Reserve Bank has indicated that it is uncomfortable with "non-fiat" cryptocurrencies like Bitcoin.

Fiat cryptocurrency and non- fiat cryptocurrency:

A non-fiat cryptocurrency is "Bitcoins for example. That's a private cryptocurrency." Whereas, the fiat cryptocurrency is a digital currency which would be issued by the Reserve Bank of India (RBI) in place of the physical one at present.

Background:

The RBI has been repeatedly cautioning everyone about the usage of cryptocurrencies, flagging a slew of concerns. It had stated that Bitcoins posed potential risks. According to some media reports, there has been a growing number of investors in such currencies over the last few years, especially with the huge spurt in the value of a few of them since the Trump administration came in the U.S.

What are cryptocurrencies?

Crypto-currency that is planned to be brought under the regulatory regime is a digital currency which allows transacting parties to remain anonymous while confirming that the transaction is a valid one. It is not owned or controlled by any institution – governments or private. There are multiple such currencies — bitcoin, ethereum, ripple are some of the popular ones. Currently, they are neither illegal nor legal in India.

Need for regulation:

Cryptocurrencies have gained popularity in the last few years. Currently, they are neither illegal nor legal in many countries including India. The market cap for all crypto-currencies has just crossed \$100 billion, with most of the increase coming in the past few months. On April 1, 2017, the total market cap was just over \$25 billion, representing a 300% rise in just over 60 days. One bitcoin today is worth as much as 60 grams of gold.

Sources: the hindu.

Decoding shell companies

The Centre has initiated action against more than two lakh shell companies as part of Operation Clean Money. Separately, the market regulator Securities and Exchange Board of India has identified 331 companies and initiated action against them.

What are shell companies?

The Companies Act, 2013 has not defined what a 'shell company' is and as to what kind of activities would lead to a company being termed a 'shell'.

Shell companies are typically corporate entities which do not have any active business operations or significant assets in their possession. The government views them with suspicion as some of them could be used for money laundering, tax evasion and other illegal activities.

Is there a law governing shell companies?

In India, there is no specific law relating to "shell companies." However, some laws help, to an extent, in curbing illegal activities such as money laundering and can indirectly be used to target shell companies — Benami Transaction (Prohibition) Amendment Act 2016; The Prevention of Money Laundering Act 2002 and The Companies Act, 2013.

Sources: the hindu.

Law Min okays draft bill on fugitive economic offenders

The law ministry has given its concurrence to **the draft Fugitive Economic Offenders bill** that will give powers to the government to confiscate property of economic offenders and defaulters who flee India, albeit with a new provision.

Saving clause is the new provision that the Law Ministry wants to be incorporated in the Fugitive Economic Offenders Bill, 2017. *A saving clause provides for certain exception(s) in a statute. It enables the repealed law to be in force with respect to some existing rights.*

Highlights of the Bill:

The bill flows from Finance Minister Arun Jaitley's 2017-18 Budget speech promising legislative changes or even a new law to confiscate the assets of such fugitives.

- It seeks to deter economic offenders from evading the process of Indian law by fleeing the country.
- The proposed law will be applicable in cases where the value of offences is over Rs 100 crore.
- The bill proposes to allow the Financial Intelligence Unit (FIU), the premier technical snoop wing under the finance ministry, to file an application for the declaration of fugitive economic offender for confiscation of their assets.
- The courts under PMLA would be entrusted with the responsibility to try the case.
- Also, the bill has provision for appointment of an administrator to dispose off the property to pay off the creditors. Besides, the provisions of the proposed law will override provisions of other existing laws.
- Also, the burden of proof for establishing that an individual is a fugitive economic offender will be on the authorities.

Need for a law in this regard:

There have been several instances of economic offenders fleeing the jurisdiction of Indian courts, anticipating the commencement, or during the pendency, of criminal proceedings. The absence of such offenders from Indian courts has several deleterious consequences— first, it hampers investigation in criminal cases; second, it wastes precious time of courts of law; third, it undermines the rule of law in India.

Who is a fugitive economic offender?

A Fugitive Economic Offender is a person who has an arrest warrant issued in respect of a scheduled offence and who leaves or has left India so as to avoid criminal prosecution, or refuses to return to India to face criminal prosecution.

Sources: et.

Modernisation of Police Forces

The Union Cabinet has given its approval for implementation of umbrella scheme of “**Modernisation of Police Forces (MPF)**” for years 2017-18 to 2019-20. The financial outlay for the scheme over the three year’s period is Rs.25,060 crore, out of which the Central Government share will be Rs.18,636 crore and the States’ share will be Rs.6,424 crore.

Salient Features:

- **Focus areas:** Special provision has been made under the Scheme for internal security, law and order, women security, availability of modern weapons, mobility of police forces, logistics support, hiring of helicopters, upgradation of police wireless, National Satellite Network, CCTNS project, E-prison project etc.
- **Budgetary support:** Under the umbrella scheme, central budget outlay of Rs.10,132 crore has been earmarked for internal security related expenditure for Jammu & Kashmir, North Eastern States and left wing extremism affected States.
- **Special focus:** Scheme of Special Central Assistance (SCA) for 35 worst LWE affected districts has been introduced with an outlay of Rs.3,000 crore to tackle the issue of underdevelopment in these district. An outlay of Rs.100 crore has been earmarked in the North Eastern States for police infrastructure upgradation, training institutes, investigation facilities etc.
- **Upgradation:** Under the scheme, new initiatives will be introduced to provide assistance to States for upgradation of police infrastructure, forensic science laboratories, institutions and the equipment available with them to plug critical gaps in the criminal justice system.
- **National database:** Police Stations will be integrated to set up a national data base of crime and criminals’ records. It will be linked with other pillars of criminal justice system such as ‘prisons, forensic science laboratories and prosecution offices.
- **Forensic labs:** The umbrella scheme also provides for setting up of a State-of Art forensic science laboratory in Amravati, Andhra Pradesh and upgradation of Sardar Patel Global Centre for Security, Counter Terrorism and Anti Insurgency in Jaipur and Gujarat Forensic Science University in Gandhi Nagar.



Significance of this scheme:

Implementation of this scheme would bolster the Government’s ability to address challenges faced in different theatres such as areas affected by LWE, Jammu and Kashmir and North East effectively and undertake development interventions which will catalyze in improving the quality of life in these areas and help combat these challenges effectively at the same time.

Way ahead:

It is expected that the umbrella scheme, “Modernisation of Police Forces (MPF)” will go a long way to boost the capability and efficiency of Central and State Police Forces by modernizing them.

Sources: pib.

Government Checking Report On Law To Deal With Internet Hate Speech

The Home Ministry is examining a report given by a high-level committee formed to propose new laws or amendments to deal with hate speech on the internet. The committee, headed by TK Viswanathan, has submitted a report on this to the Home Ministry recently.

Background:

The committee was formed after the Supreme Court struck down section 66A of the Information Technology Act. Section 66A defines the punishment for sending “offensive” messages through a computer or any other

communication device like a mobile phone or a tablet. A conviction can fetch a maximum of three years in jail and a fine.

Considering the growing menace of hate speech and abuse on the internet in the absence of the provision, the committee was reportedly set up to propose new laws and amendments in existing laws.

Suggestions made by the committee:

- Section 78 of the IT Act needs to be substituted and Section 153 and 505A of the Indian Penal Code need to be amended.
- Section 78 primarily dealt with capacity building and needs to be relooked at with a view to sensitise law enforcement agency officers. Under it, a police officer of the rank of inspector or above was empowered to investigate offences.
- Each state should have a State Cyber Crime Coordinator which should be an officer not below the rank of Inspector General of Police.
- Each district to have a District Cyber Crime Cell headed by an officer not below the rank of sub-inspector.

Sources: the hindu.