INDEX

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 4

Empowered Steering Committee (ESC) for Olympic preparation

Ministry of Youth Affairs and Sports has approved the constitution of an Empowered Steering Committee (ESC) on the basis of the recommendations of the interim report of the Task Force.

About Task Force
- The Task Force is 8-member team with priority to submit its interim report with focus on preparations for Olympics.
- The Task Force was constituted in September 2016.
- It was formed for preparation of a comprehensive action plan, including short-term and medium to long-term measures for effective participation of Indian sportspersons in the next three Olympic Games to be held in 2020 (Tokyo), 2024 (Paris) and 2028 (Los Angeles).

PEPPER IT WITH
Target Olympic Podium Scheme

ESC composition
- Honorary Chairperson (to be appointed by the Government).
- IOA representative (President, IOA as member and Secretary General, IOA as an alternate member).
- 3 eminent athlete representatives who have retired from active sports within past 10 years among other members from government and sports.
- One High Performance Director (to be selected through a search committee)
- One Chief Executive Officer (to be selected through a search committee)
- 3 Sports Scientists, respectively from Biomechanics, Sports Nutrition and Sports Psychology
- One elite coach

Function
1. The committee will review the core probable list of each High Priority and Priority disciplines for Commonwealth Games, Asian Games and Olympic Games and make recommendations.
2. It will also review the annual calendar for Training and Competitions (ACTCs) approved by the Government in consultation with the National Sports Federation (NSF) concerned and make specific recommendations with respect to any additional or supplementary requirements.
3. It will also recommend names of national and international training institutions for their empanelment for providing training, coaching and other support to athletes.
4. The Committee will also have power to recommend specific plans or packages for TOPS (Target Olympic Podium Scheme) beneficiaries, picked by the TOPS Committee.
5. The ECS will also assist the government in formulating Qualification Requirements (QRs), job description and conducting selection process with the involvement of National Sports Federation (NSF).

National Nutritional Week

The National Nutrition Week will be observed throughout the country from 1st to 7th September. The theme of the National Nutrition Week for 2017 is "Optimal Infant & Young Child Feeding Practices: Better Child Health".
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.

PEPPER IT WITH
FSSAI, MAA, National Nutrition Strategy

Initiatives
Large numbers of State, district and village level activities are being organized during this week with workshops, lectures and demonstrationson low cost nutritious recipes to create awareness regarding right nutrition.

Awareness generation on weight management and its importance through Body Mass Index will be held for adolescent boys and girls.

Awareness programmes will be held at village level through puppet shows, skits, dance & dramma, films, slide shows, AV Spots, nutrition rallies etc.

Importance 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.

Food for thought

Fortification of eatables is aimed at fighting malnutrition

What it means
Fortification is the addition of key vitamins and minerals, such as iron, iodine, zinc, Vitamins A & D, to staple foods such as rice, milk and salt to improve their nutritional content

- The nutrients may or may not have been originally present in the food before processing

- It is a simple, proven, cost-effective and complementary strategy in use across the globe

- The draft Food Safety and Standards Regulations, 2016, prescribe the standards for fortification of salt, oil, milk, and rice

Conclusion

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.

About FSSAI Food Fortified Logo
The square represents completeness. The plus sign (+) is about adding extra nutrition and vitamins to daily meals, to adding more to life. And the ring **around the letter 'F' illustrates the** ring of good health, protection and an active life. The Colour Blue symbolizes purity and good health.

Onam

✓ Onam Festival is celebrated in the beginning of the first month of Malayalam Calendar (Kolla Varsham) called Chingam. This month corresponds to August-September in Gregorian calendar and Bhadrapada or Bhadon in Indian (Hindu) Calendar.

✓ Atham and Thiru Onam are the most important days for Onam festivities.

✓ It is believed that Onam celebrations started during the Sangam Period. Record of celebrations can be found from the time of Kulasekhara Perumals (800 AD).

✓ After the month of deprivation, Karkidakam (last month of Malayalam Calendar), farmers of Kerela are happy with a bountiful harvest and celebrate the festival to the hilt.

✓ Number of sports and games events organized on this day are collectively called Onakalika.

✓ Dances performed during Onam Kummatti kali, Pulikali/Kaduvakali, Kathakali, Thumbi Thullal, Kaikotti kali.

PEPPER IT WITH
Kolu dolls,
Bhama Kalapam

Pradhan Mantri Matru Vandana Yojana (PMMVY)

Objectives of PMMVY

- Providing partial compensation for the wage loss in terms of cash incentives so that the woman can take adequate rest before and after delivery of the first living child.
- The cash incentive provided would lead to improved health seeking behaviour amongst the Pregnant Women and Lactating Mothers (PW & LM).

PEPPER IT WITH ECCE, POCSO e-box, m-Aadhaar, Mahila E- Haat

Target beneficiaries

1. All Pregnant Women and Lactating Mothers, excluding PW&LM who are in regular employment with the Central Government or the State Governments or PSUs or those who are in receipt of similar benefits under any law for the time being in force.
2. All eligible Pregnant Women and Lactating Mothers who have their pregnancy on or after 01.01.2017 for first child in family.
3. The date and stage of pregnancy for a beneficiary would be counted with respect to her LMP date as mentioned in the MCP card.

Benefits

- ✓ The eligible beneficiaries would receive the remaining cash incentive as per approved norms towards the Maternity Benefit under JSY after institutional delivery so that on an average, a woman will get RS 6000/-.
- ✓ PW & LM shall receive a cash benefit of Rs. 5000/- in three instalments at the stages as specified in scheme.
- ✓ Transfer of benefits would be through DBT in Bank/Post Office account only. No **disbursement in the form of "cash" or "cheque".**

Implementation Guideline

1. The Maternity Benefit Programme would be implemented in all the districts of the country in accordance with the provision of the National Food Security Act, 2013.
2. PMMVY, a Centrally Sponsored Scheme, would provide grants-in-aid to the State Governments/ Union Territory Administrations (UTs) in a dedicated Escrow account for the purpose of direct benefit transfer to the beneficiaries.
3. PMMVY will be implemented using the platform of Anganwadi Services scheme of Umbrella ICDS under Ministry of Women and Child Development in respect of States/ UTs implementing scheme.
4. PMMVY shall be implemented through a centrally deployed Web Based MIS Software application and the focal point of implementation would be the Anganwadi Centre (AWC) and ASHA/ ANM workers.

RECORDS, REPORTS, MONITORING AND EVALUATION

Under the scheme the forms contain sensitive and personal information of beneficiary and her husband such as Aadhaar number, bank details, medical reports etc. Therefore, such records, both in physical or electronic form, should be kept in custody of authorised personnel. NITI Aayog will monitor the Scheme every month. For an initial period of two years after the launch of the Scheme to keep checks on its performance.

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.

PEPPER IT WITH
TraceNet, AnarNet, Hunar Haat

Attributes of App

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

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 passed by the Parliament in December, 1985. The Authority replaced the Processed Food Export Promotion Council (PFEPC)

Composition of APEDA

- A Chairman, appointed by the Central Government.
- The Agricultural Marketing Advisor to the Government of India, ex-official.
- One member appointed by the Central Government representing the Planning Commission.
- Three members of Parliament of whom two are elected by the House of People and one by the Council of States.

Functions of APEDA

1. Development of industries relating to the scheduled products for export by way of providing financial assistance, joint ventures and other reliefs and subsidy schemes;
2. Fixing of standards and specifications for the scheduled products for the purpose of exports;
3. Carrying out inspection of meat and meat products in slaughter houses, processing plants, storage premises, ensuring the quality of such products;
4. Improving of marketing and packaging of the Scheduled products outside India;

SAUNI Yojana

Why is News

The President of India **laid the foundation stone of** 'Saurashtra Narmada Avataran Irrigation Yojana' **(SAUNI)** Phase-II Link-4 in Rajkot recently.

Sauni Yojana has been launched to divert one million acre feet (MAFt) excess over flowing flood water of Narmada allocated to Saurashtra Region. The excess over flowing flood water of Narmada will be distributed to 115 reservoirs of eleven districts of Saurashtra through total 1126 km long four link pipelines benefitting 10,22,589 acre land.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II							X				
III			X								
IV											
M											

Link: 1 From Machhu-II dam of Morbi district to Sani Dam of Jamanagar District: Having carrying capacity of 1200 cusecs, 30 reservoirs of Rajkot, Morbi, Devbhoomi Dwarka and Jamanagar Districts will be filled and 2,02,100 acre area will be benefitted. The works for about 57.67 Km long pipeline of initial reach of this link are awarded and are under progress.

Link: 2 Limbdi Bhogavo-II Dam of Surendranagar District to Raidi Dam of Amreli District: Having carrying capacity of 1050 cusecs, 17 reservoirs of Bhavnagar, Botad and Amreli Districts and area of 274700 acres will be benefitted. The works for about 51.28 Km long pipeline of initial reach of this link are awarded and are under progress

Link: 3 From Dholidhaja Dam of Surendranagar District to Venu-I Dam of Rajkot District: Having carrying capacity of 1200 cusecs, 28 reservoirs of Rajkot, Jamanagar, Dev bhoomi Dwarka, Porbandar, Morbi and Surendranagar Districts

and 198067 acre area will be benefitted. The works for about 66.30 Km long pipeline of initial reach of this link are awarded and are under progress.

Link: 4   From Limbdi Bhogavo-II Dam of Surendranagar District to Hiran-II Irrigation scheme of Junagadh: Having carrying capacity of 1200 cusecs , 40 reservoirs of Rajkot, Surendranagar, Junagadh, Porbandar, Gir Somnath, Amreli and Botad Districts and area of 3,47,722 acre will be benefitted. The works for about 54.70 Km long pipeline of initial reach of this link are awarded and are under progress.
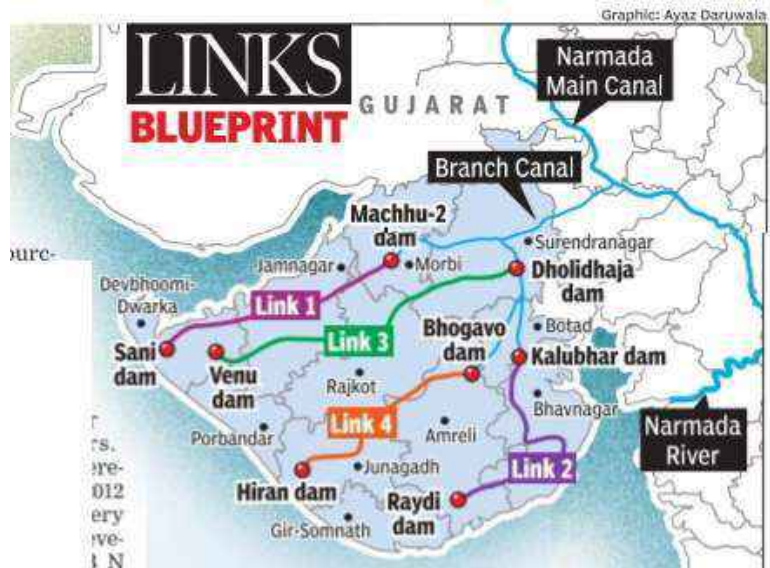
Way Ahead

The bulk of SAUNI water will be pumped by motors which will be an expensive venture and it will make SAUNI water as expensive as bottled water. But the farmers will not be charges extra money for it. This will consume massive amount of electricity creating expensive bills and the motor and other equipment used to pump will also add to its mammoth budget.

Lingayats and their demands

Article 30 of the Constitution grants the minorities, whether religious or linguistic, the right to establish and administer their own educational institutions. Lingayats who want the community to be declared a separate religious sect imagine a Constitutional status on a par with Buddhists.

Lingayats

1. Lingayats are followers of Basavanna (12th century social reformer-philosopher-poet) and the sharanas, whose philosophy is expressed in thousands of *vachanas*. In several vachanas, the sharanas have rejected the Vedas, *shastras*, *smritis* and the Upanishads.

> PEPPER IT WITH
> Vachana Movement

2. They also rejected the system of caste based on the *varnashrama*, rebuffed faith in *karma* based.
3. They scorned temple and idol worship. The rejected the phallic *linga* symbol of Shiva and opted for *ishta* linga, which represents inner conscience.
4. Basavanna and all sharanas rejected everything about the Hindu religion and rebelled against it.Basavanna had rejected all such Brahmanical notions.

Veerashaivas

1. Veerashaivas are the followers of the five *peethas* (religious centres), called pancha peethas. These peethas are set up on similar lines to the four peethas set up by Adi Shankara.
2. The Veerashaiva faith is identical to the Brahmanical belief that they are born from the ears of Brahma.
3. They believe that they are born straight out of the *Shivalingam* – the phallic symbol worshipped by Shaivas.
4. They claim *Siddhantha Shikhamani* said as their holy book.

Differences and debate

The essential difference between the Lingayata dharma and the Veerashaiva is that the latter accepts the Vedic texts and practices like caste and gender discrimination, while Basavanna not only protested these, he offered an alternative that is an anti-thesis of sanatana dharma. This debate assumes a larger significance these days, when Hinduism is being equated exclusively **with sanatana dharma, in contradiction to the origin of the word `Hindu', which included Jains,** Buddhists and Sikhs. Shaivites, like Vaishnavites, are a part of the Hindu system of faith.

Practice	Veerashaiva	Lingayat
The founder	Panchacharyas	Basavanna
Religious script	Vedas, Agama, *Siddhanta Shikhamani*	Vachana literature
Caste and gender equality	No equality. It puts Aradhyas at the top of the ladder, while there is no gender equality	Complete equality of men and women in religious, political and social practices
Worship	The statue of Shiva, and Shiva as envisaged in the Vedas	Shiva (ishta linga) as a formless
Temples and priests	Has a system of temples and priests	Bans temple worship. Worships only ishta linga

Demands

The Lingayats, a numerically and politically strong community of Karnataka, want to be categorised as a religious group separate from Hindus. The Veerashaivas worship 'Shiva' as god, Lingayats worship Shiva in his formless State. The Lingayats demand for separate identity and tag to their religion. Lingayat-Veerashaivas are divided into three groups: one demanding separate status for Lingayats, another calling for Lingayats to be identified as Veerashaivas and the third seeking status quo and unity.

Way Ahead

A State can have little to do with granting religious status to any community. If the community representatives submit a proposal burying their differences then their demand will be forward to the Centre. The Constitution grants linguistic and religious minorities the right to establish and administer their own educational institutions and Lingayat maths run a host of them.

CIPAM-DIPP launches social media campaign to promote GI

The Cell for IPR Promotions & Management (CIPAM) and 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 (IPR).
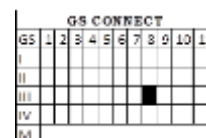
Geographical Indication/GI

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.Darjeeling Tea, Mahabaleshwar Strawberry, Blue Pottery of Jaipur, Banarasi Sarees and Tirupati Laddus are some of the GIs.

International Laws

- Under Articles 1 (2) and 10 of the Paris Convention for the Protection of Industrial Property, geographical indications are covered as an element of IPRs.
- They are also covered under Articles 22 to 24 of the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement, which was part of the Agreements concluding the Uruguay Round of GATT negotiations.

Page 11

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

- India, as a member of the World Trade Organization (WTO), enacted the Geographical Indications of Goods (Registration & Protection)Act, 1999 has come into force with effect from 15th September 2003.

Significance of GI

1. GIs are of utmost importance to the country as **they are an integral part of India's rich culture and** collective intellectual heritage.
2. 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.
3. Certain GI products can benefit the rural economy in remote areas, by supplementing the incomes of artisans, farmers, weavers and craftsmen.
4. With the protection assured by GI registration, the market is developed, pirates and counterfeiters cannot encroach that market.
5. Consumers are guaranteed of the genuineness of the product and of quality assurance which promotes Brand building.
6. In the recent past, the government had launched similar initiatives such as #IWearHandloom and #CottonIsCool to promote and revive traditional hand-woven textiles.

o CIPAM, which functions under the aegis of the Department of Industrial Policy and Promotion (DIPP) was set up pursuant to the National IPR Policy that envisages its creation in order to facilitate promotion, creation, and commercialization of IP assets.
o CIPAM logo has been launched keeping in mind the clarion call, **"Creative India; Innovative India"**.
o It will help in protecting the public interest, as well as promoting creativity and innovation in the country.

PEPPER IT WITH
GI of Goods (Registration and Protection) Act, 1999, GI of Goods (Registration & Protection) Rules, 2002

Diksha Portal

On the occasion of Teachers' Day Union Ministry of Human Resource and Development (MHRD)launched DIKSHA portal, a national digital infrastructure for teachers. DIKSHA will enable, accelerate and amplify solutions in the realm of teacher education.

Key Highlights

✓ Diksha portal launched with a tagline **"National Digital Infrastructures for Our Teacher Our Heroes".**
✓ It includes the whole life cycle of a teacher beginning from the time when they enroll in Teacher Education Institutes(TEIs) to the time of their retirement.
✓ It can be otherwise called as National Digital Infrastructure for teachers. So, that provides a digital platform for teachers to make their lifestyle more digital.

PEPPER IT WITH
National Teacher Platform, NCTE, MITRA, APEKX, SCERT

Benefits of Diksha Portal

1. Under this digital platform, teachers will be able to access and create high-quality teaching, learning and assessment resources for all subjects and levels in all Indian languages.
2. They can utilize the power of internet sitting at home.
3. They can learn free courses online through this portal as well as can take pieces of training in both offline as well as online modes.
4. This initiative will help our teachers to make interaction and discussion with other teachers, and gain more qualitative contents.
5. They can customise the infrastructure according to their requirement.
6. 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.

DIKSHA

- DIKSHA is a unique initiative which leverages existing highly scalable and flexible digital infrastructures, while keeping teachers at the center.
- **It is built considering the whole teacher's life cycle** - from the time student teachers enroll in Teacher Education Institutes (TEIs) to after they retire as teachers.
- Teacher will be able to use DIKSHA to access and create high quality teaching, learning, assessment resources for all subjects and level in all Indian language.
- States, government bodies, NGOs and even private organisations, can integrate DIKSHA into their respective teacher initiatives based on their goals, needs and capabilities.
- It is a joint initiative of MHRD and NCTE.

The ministry's efforts and initiatives like DIKSHA etc are in the direction of improving quality of education for all i.e "Sabko Shiksha aur Acchi Shiksha and **"teach to transform, educate to empower and learn to lead"** assaid reiterated by PM.

UJALA scheme launched in Melaka, Malaysia

The successful Indian model of UJALA (Unnat Jyoti by Affordable Lighting for All) scheme has become a sought-after example for the different nations of the world and will now be implemented in Melaka, Malaysia to extend programme benefits to people of the region.

It was launched by Energy Efficiency Services Limited (EESL), under Ministry of Power, Government of India.

GS CONNECT

GS	1	2	3	4	5	6	7	8	9	10	11
I											
II							■				
III											
IV											
M											

PEPPER IT WITH URJA, UDAY, ARANG, **NAPCC**

Key Highlights
- Each household in Melaka will get 10 high quality 9-watt LED bulbs at a cost of only RM 10 (Malaysian Ringgit).
- Energy Efficiency Services Limited (EESL) plans to distribute about 1 million 9W LED bulbs, which will replace 18W CFLs. The initiative will have the logistical assistance and facilitation support from Green Growth Asia, which is a not for profit organization.
- Its impact in Malaysia will bring about clean energy, contribute to climate change targets and save the already dwindling energy resources.
- Melaka will be able to reduce carbon emissions by around 19,000 tons per year.

About UJALA
✓ UJALA scheme aims to promote efficient use of energy at the residential level; enhance the awareness of consumers about the efficacy of using energy efficient appliances and aggregating demand to reduce the high initial costs thus facilitating higher uptake of LED lights by residential users.
✓ The EESL is the nodal agency for running the UJALA scheme through power distribution companies and other channel of retail like e-market places.
✓ The prices of energy efficient appliances — LED bulb, tube light and fan — being distributed under the UJALA scheme are now available at uniform rates after the implementation of the Goods and Service Tax.
✓ It may be noted that the scheme was initially labelled DELP (Domestic Efficient Lighting Program) and was re-launched as UJALA.

Key Features of UJALA
1. Under this scheme LED lights will be available at subsidized prices.
2. The negative impact of incandescent bulbs can be checked and controlled by this scheme positively affecting the environment.
3. It is energy efficient and good for conservation of energy.
4. It will help in GHG emission reduction.
5. Helps in electricity saving and reduction in consumer bill.

National Pavan Dashboard showing recent data

34,357 mn kWh	INR 13,743 Cr	6,879 MW	2,78,29,449 t CO₂
Energy saved per year	Cost saving per year	Avoided Peak Demand	CO₂ Reduction per year

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 13
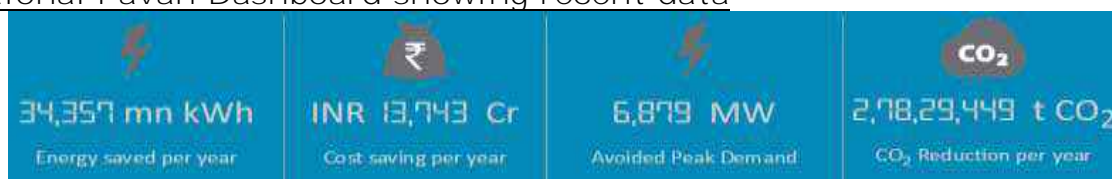
International Energy Agency (IEA)

About

The IEA examines the full spectrum of energy issues including oil, gas and coal supply and demand, renewable energy technologies, electricity markets, energy efficiency, access to energy, demand side management and much more.

The IEA is at the heart of global dialogue on energy, providing authoritative analysis through a wide range of publications, including the flagship *World Energy Outlook* and the *IEA MarketReports*; data and statistics, such as *Key World Energy Statistics* and the *Monthly Oil Data Service.*

There are 29 member countries in IEA. India is an associate member at IEA. It has its secretariat at Paris, France.

Total final consumption by sector (Mtoe)

The four main areas of IEA focus are:

1. Energy Security: Promoting diversity, efficiency, flexibility and reliability for all fuels and energy sources;
2. Economic Development: Supporting free markets to foster economic growth and eliminate energy poverty;
3. Environmental Awareness: Analysing policy options to offset the impact of energy production and use on the environment, especially for tackling climate change and air pollution; and
4. Engagement Worldwide: Working closely with partner countries, especially major emerging economies, to find solutions to shared energy and environmental concerns.

> **PEPPER IT WITH**
> Integrated Energy Policy Report, Energy Conservation Act 2001, NMEEE

The new version of *KWES* still provides headline data on all fuels, and now also contains additional information highlighting the rapid growth of renewable technologies. Data from latest *KWES* Publication depicting final energy consumption.

The *World Energy Outlook (WEO),* widely regarded as the gold standard of energy analysis, **provides strategic insight on what today's policy and investment decisions mean for long**-term trends.

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, sectorial regulator Telecom Regulatory Authority of India (Trai) has recommended delicensing of a chunk of spectrum in a few bands.

The telecom regulator in its recommendations on "spectrum, roaming and quality of service related requirements in M2M communications" stated spectrum allocation should be technology and service neutral and no separate spectrum band should be allocated exclusively for M2M services.
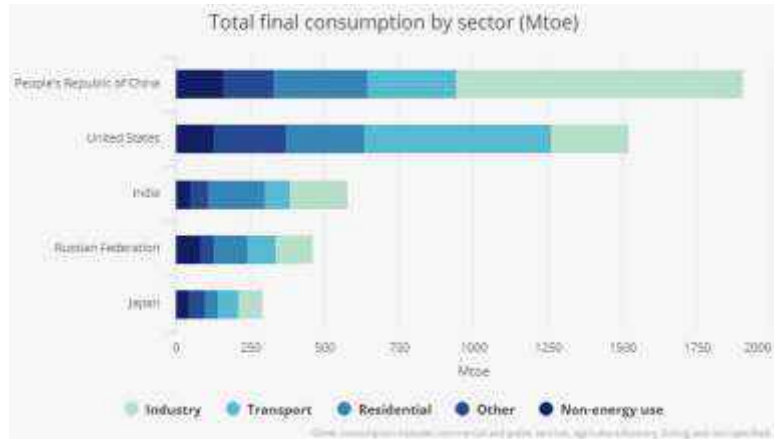
Key Recommendations

1. Delicensng the V-band (57-64 GHz) as recommended by the authority on various occasions may be done on priority.
2. Trai said that 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).
3. 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.
4. Regarding the issue of data security and privacy in M2M, the authority will issue comprehensive recommendations after due deliberations on the issues highlighted through the consultation paper on "privacy, security and ownership of data in the telecom sector.
5. A National Trust Centre (NTC), under the aegis of TEC, should be created for the certification of M2M devices and applications (hardware and software).

> **TRAI**
> TRAI was established by Act of Parliament, called the Telecom Regulatory Authority of India Act, 1997, to regulate telecom services, including fixation/revision of tariffs for telecom services which were earlier vested in the Central Government.
> Composition: Chairman and 2< **members ≤6** all appointed by the Central Government.
> Chairman should a judge of the Supreme Court or Chief Justice of a High Court.

> **PEPPER IT WITH**
> National Telecom M2M Roadmap, ITU, ETSI, eKYC, TDSAT, Fibocom, Unlimit

M2M

Machine to machine (M2M), refersto technologies that allow both wireless and wired systems to communicate with other devices of the same ability. M2M uses a device (such as a sensor or meter) to capture an event, which is relayed through a network (wireless, wired or hybrid) to an application, that translates the captured event into meaningful information.

M2M is also being inter-changeably used with various other terms - Internet of Things (IoT), Internet of Everything (IoE), Smart systems.

Industry/ Vertical	M2M applications
Automotive / Transportation	Vehicle tracking, e-call, V2V and V2I applications, traffic control, Navigation, Infotainment, Fleet management, asset tracking, manufacturing and logistics
Utilities / Energy	Smart metering, smart grid, Electric line monitoring, gas / oil / water pipeline monitoring.
Agriculture	Remotely controlled irrigation pump, Remote Monitoring of Soil Data
Smart City	Intelligent transport System, Waste management, Street Light control system, Water distribution, Smart Parking
Public Safety	Highway, bridge, traffic management, homeland security, police, fire and emergency services.
Financial /Retail	Point of sale (POS), ATM, Kiosk, Vending machines, digital signage and handheld terminals.
Safety & Surveillance	Women Safety Bands, Commercial and home security monitoring, Surveillance applications, Fire alarm, Police / medical alert
Health care	Remote monitoring of patient after surgery (e-health), remote diagnostics, medication reminders, Tele-medicine, wearable health devices

The Code on Wages Bill 2017

As part of labour law reforms, the Government has undertaken the exercise of rationalisation of the 38 Labour Acts by framing 4 labour codes viz Code on Wages, Code on Industrial Relations, Code on Social Security and Code on occupational safety, health and working conditions.

1. The Code on Wages Bill 2017 has been introduced in Lok Sabha by Ministry of Labour & Employment recently. 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) theEqual Remuneration Act, 1976.After the enactment of the Code on Wages, all these four Acts will get repealed. The Codification of the Labour Laws will remove the multiplicity of definitions and authorities leading to ease of compliance without compromising wage security and social security to the workers.

> PEPPER IT WITH
> Minimum Wage Code Bill,

2. The Code will apply to establishments where any industry, trade, business, manufacturing or occupation is carried out. This will also include government establishments.
3. 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.
4. 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. 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.

Payment of Wages

- Wages will be paid in (i) coins, (ii) currency notes, (iii) by cheque, or (iv) through digital or electronic mode. The wage period will be fixed by the employer as either: (i) daily, (ii) weekly, (iii) fortnightly, or (iv) monthly.
- Deductions: **Under the Code, an employee's wages may** be deducted on certain grounds including: (i) fines, (ii) absence from duty, (iii) accommodation given by the employer, or (iv) recovery of advances given to the employee, among others.

Payment of Bonus

- Determination of bonus: The employer will pay each employee an annual bonus of at least: (i) 8.33% of his wages, or (ii) Rs 100, whichever is higher.
- Maximum bonus: An employee can receive a maximum bonus of 20% of his wages.

Other key features

- Advisory boards: The central and state governments will constitute their respective advisory boards. These boards will have representation from: (i) employees, (ii) employers, and (iii) independent persons. Further, one-third of the total members will be women.
- Offences: The Code specifies penalties for offences committed by an employer, such as (i) paying less than the due wages, or (ii) for contravening any provision of the Code.

International Literacy Day – 2017

- The 51st International Literacy Day (ILD) is being celebrated on 8th September, 2017 and the theme announced by UNESCO is `Literacy in **a digital 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.
- The overall aim is to look at what kind of literacy skills people need to navigate increasingly digitally-mediated societies, and to explore effective literacy policies and programmes that can leverage the opportunities that the digital world provides.
- ILD has been entrusted to lead the Global Education 2030 Agenda through Sustainable Development Goal 4.

Socio-economic indicators

Total population (in thousands)	1,311,051
GDP in billions - PPP$	8,000
GDP per capita - PPP$	6,089
Adult literacy rate (2011)	69.3
Female adult literacy rate (2011)	59.28
Youth literacy rate (2011)	86.14
Female youth literacy rate (2011)	81.85
Government expenditure on education as % of GDP (2013)	3.84
R&D as % of GDP	0.6

Source: UNESCO Institute for Statistics

Rabindranath Tagore: **"Where the mind is without fear and the head is** *held high, where knowledge is free; where the world has not been broken up* **into fragments by narrow domestic walls".**

PEPPER IT WITH
Vidyanjali, Digital Gender Atlas, SSA ShaGun

National Literacy Mission Authority (NLMA)

NLMA, an autonomous wing of MHRD is the nodal agency for overall planning and management and funding of Adult Education Programmes and institutions. It was set up in 1988 with the approval of the Cabinet.

NLMA is mandated with:

1. Policy and planning;
2. Developmental and promotional activities;
3. Operational functions including assistance to voluntary agencies and other NGOs,
4. Technology demonstration
5. Leadership training
6. Resource development including media and materials
7. Research and development
8. Monitoring and evaluation etc.

Elementary level	Sarva Shiksha Abhiyan (SSA) and Mid Day Meal (MDM)
Secondary level	Rashtriya Madhyamik Shiksha Abhiyan (RMSA), Model Schools,
Adult Education	Saakshar Bharat
Teacher Education	Scheme for Strengthening Teacher Education
Women's education	Mahila Samakhya
Minority Education	Scheme for Providing Quality Education in Madarsas (SPQEM)
Misc.	Infrastructure Development of Minority Institutions (IDMI), **Vocational Education, Girls' Hostel, Inclusive Education of the Disabled, ICT at School**

Way Ahead

1. Increase access to quality school education by expanding the network of schools, through existing as well as new institutions.
2. Bring equity to the system of secondary education by including disadvantaged groups as well as weaker sections, who were kept deprived hitherto.
3. Ensure quality and improved standards of education by supporting the existing institutions and facilitating setting up of new ones

Swachhathon 1.0

About

Swachhathon 1.0 – Swachhata Hackathon is an attempt to crowd source solutions for some of the pressing problems faced by the country in Sanitation and Hygiene. MoDWS invites students from schools and colleges, professionals, organizations, startups and others to come up with exciting, innovative, novel and viable solutions in the categories mentioned below –

1. Monitoring usage of toilets
2. Behaviour Change
3. Toilet technology
4. Operation and maintenance of school toilets
5. Technological solutions for safe disposal of menstrual waste
6. Early decomposition of fecal matter

The hackathon was open for all (including international entries), and was hosted on the *innovate.mygov.in* portal. Swachhathon 1.0 has received massive response from young innovators of the country.

> **PEPPER IT WITH**
> Mashelkar Committee

Govt comes up with rules dealing with on-board unruly passengers

The Ministry of Civil Aviation unveiled rules to tackle on-board disruptive and unruly behaviour by passengers. The new rules will allow for the formation of a national, No Fly List of such unruly passengers emphasizing the **Government's commitment for ensuring safety of other passengers, crew and** aircraft.

The DGCA has revised the relevant sections of the Civil Aviation Requirement (CAR Section 3, Series M, Part VI on "Handling of Unruly Passengers) in accordance with the provisions of Tokyo Convention 1963.

Unruly passenger- A passenger who fails to respect the rules of conduct at an airport or on board an aircraft or to follow the instructions of the airport staff or crew members and thereby disturbs the good order and discipline at an airport or on board the aircraft. Categorisation of *Unruly Passenger.*

Level 1: Unruly behaviour (physical gestures, verbal harassment, unruly inebriation etc.)
Level 2: Physically abusive behaviour (pushing, kicking, hitting, grabbing or inappropriate touching or sexual harassment etc.)
Level 3: Life-threatening behaviour (damage to aircraft operating systems, physical violence such as choking, eye gouging, murderous assault, attempted or actual breach of the flight crew compartment etc.)

> The Tokyo Convention of 1963 was the **international community's first attempt to** provide a uniform code in respect of offences and certain other acts committed on board civil aircraft.
> This Convention shall apply in respect of:
> ✓ offences against penal law;
> ✓ acts which, whether or not they are offences, may or do jeopardize the safety of the aircraft or of persons of property therein or which jeopardize good order and discipline on board.
> ✓ This Convention shall not apply to aircraft used in military, customs or police services.

Internal Committee

Whenever an airline receives a complaint of unruly behaviour from the pilot-in-command, the incident may be referred by the airlines to an Internal Committee. This Internal Committee shall be constituted by the airline and consists of the following:

> **PEPPER IT WITH**
> Aircraft Rules,1937, ICAO

- Retired District & Session Judge as Chairman.
- A representative from a different scheduled Airline as Member.
- Representative from a passengers association or consumer association or retired officer of Consumer Dispute Redressal

The Internal Committee shall decide the matter within a period of 30 days along with category level of the unruly passenger and also decide the duration for which the unruly passenger will be banned from flying in accordance with CAR.

No-Fly List

The person so included in the No-Fly List shall be communicated by the airline concerned about his inclusion in the list along with the reason thereof and the duration of the ban.

Level 1 upto three months

Level 2 upto six months

Level 3 for a minimum period of 2 years or more without limit

Way Ahead

In absence of CCTV or co-passengers who may be witness to altercation leaving passenger without any evidence to his/her defense. The CAR does not provide imposition of any penalty on airline staff for false and frivolous complaints and is not equipped with tools and mechanism to check the false branding by staffs. This put the right of air passenger in jeopardy. But the initiative taken is execellent to curb incidents of unruly passengers like Gaikwad with indicated punishment. But it should bring the airline staffs too under disciplinary ambit of CAR for best implementations of rules.

FoSCoRIS

Through a notification dated 11 September 2017 the FSSAI has implemented the Food Safety Compliance Through Regular Inspections and Sampling (FoSCoRIS) system. It was unanimously agreed at the 20th meeting of the Central Advisory Committee (CAC).

PEPPER IT WITH FSS Act, CAC

FoSCoRIS

It is a web-based platform to verify compliance of food safety and hygiene standards by food businesses as per regulatory requirements. The FoSCoRIS is a nationwide online system for food safety compliance.

Key Highlights

1. FoSCoRIS is a web-based real time inspection platform for Food Safety Officer (FSO) via hand held devices like mobile, tablets etc.
2. It uses instant geo-tagging, time-stamping, real-time data collection and multi-level verifications. It would replace the current system which is mostly ad hoc and subjective.
3. FSSAI has also requested the Commissioners of Food Safety to appoint a nodal officer for the FoSCoRIS System and to send the details of such officers to the State Food Authority as per the proforma provided for this purpose so they may be integrated for FoSCoRIS.
4. The application based inspection not only saves time but also increases efficiency and effectiveness of FSOs.

Way Ahead

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.

FSSAI

- The FSSAI has been established under Food Safety and Standards, 2006 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) is appointed by Central Government. The Chairperson is in the rank of Secretary to Government of India.
- The Chairperson and the Members other than ex officio Members of the Food Authority shall be appointed by the Central Government on the recommendations of the Selection Committee.
- Apart from Chairman and Chief Executive Officer there are 24 member out of which one-third shall be women.
- The Chairperson and the members other than ex officio Members shall hold office for a term of three years, and shall be eligible for re-appointment for a further period of three years: Provided that the Chairperson shall not hold office as such after he has attained the age of sixty-five years.

Payment of Gratuity (Amendment) Bill, 2017

The Payment of Wages (Amendment) Bill, 2017 was introduced in Lok Sabha by the Ministry of Labour and Employment and has been passed recently by Union Cabinet. The Bill amends the Payment of Wages Act, 1936.

Key Highlights

1. 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.
2. 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.
3. The present upper ceiling on gratuity amount under the Act is Rs. 10 Lakh with implementation of 7th Central Pay Commission, in case of Government servants, the ceiling now is Rs. 20 Lakhs.
4. The Act is applicable to those establishments where 10 or more employees work on any single day in the preceding 12 months of the year.
5. An employee is eligible to receive gratuity only if he has completed at least five years of continuous service with an organisation, without any interruption.
6. Gratuity received during the period of service is fully taxable.

The release of the additional instalment of DA represents an increase of 1% over the existing rate of 4% of the Basic Pay/Pension, to compensate for price rise. This increase is in accordance with the accepted formula, which is based on the recommendations of the 7th Central Pay Commission.

Way Ahead

A mobile application will be launched recently for central government employees who are about to retire to help them monitor the progress of their pension settlement cases. Retired employees will also be able to assess their superannuation funds and record complaints.

The app will be launched by Ministry of State for Personnel, Public grievances and Pensions.

> PEPPER IT WITH
> Anubhav portal, EPFO

FSI/FAR norms in mega cities

Minister of Housing and Urban Affairs have directed review of FSI and FAR norms in mega cities to ensure better utilization of scarce urban land resources in the context of rapid urbanization in the country.

Ministry has referred to the recommendation of NITI Ayog for relaxation of Floor Space Index (FSI) and Floor Area Ratio (FAR) norms in urban areas to give a push to urban development.

FSI (Floor Space Index)

FSI is the **ratio of a building's total floor area to the size of t**he 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.

FARFloor Area Ratio

The floor area ratio (FAR) is the relationship between the total amount of usable floor area that a building has, or has been permitted for the building, and the total area of the lot on which the building stands. This ratio is determined by dividing the total, or gross, floor area of the building by the gross area of the lot.

Conclusion

The focus now is on the wide disparity in FSI/FAR ratios across cities and its impact on realty prices and long-term appreciation. Intuitively, a city that keeps a tight lid on FSI is likely to see a higher rate per sq.ft., assuming limited availability of land in a particular city area. And with an increase in demand for space in that area, the appreciation will most likely be faster.

Expressing concern over poor public transport infrastructure in cities, Ministry stressed on the need for integrated land use and transport planning with the objective of promoting compact and dense urban development to minimize the use of personal motorized transport.

> PEPPER IT WITH
> PMAJ(U), NULM, RRY

Chakma and Hajongs: Citizenship Issue

Amidst the uproar over Rohingya Muslims, the Union Home Ministry cleared the citizenship for over one lakh Chakma-Hajongs, who fled to India in the 1960s to escape religious persecution in Chittagong Hill area of Bangladesh (the then undivided Pakistan). They had to flee when their land was submerged by the Kaptai dam.

Background

- The Chakmas, who are Buddhists, and 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.
- The number of these refugees has increased from about 5,000 in 1964-69 to 100,000. At present, they do not possess citizenship and land rights but are provided basic amenities by the state government.

SC verdict and hurdles

- ✓ In 2015, the Supreme Court had directed the Central government to grant citizenship to the Chakma and Hajong refugees, mostly staying in Arunachal Pradesh.
- ✓ The central government is trying to find a workable solution to the issue by proposing that the Chakma and Hajong refugees will not be given rights enjoyed by Scheduled Tribes, including land ownership, in Arunachal Pradesh.
- ✓ However, they may be given Inner Line Permits required for non-locals in Arunachal Pradesh to travel and work.
- ✓ The local government (AP) is trying to find a middle ground so that the Supreme Court order is honoured, the local people's rights are not infringed and the human rights of the Chakmas and Hajongs are protected.
- ✓ The refugees were supported by the government in education and jobs, and were given rations under the public distribution system.

The Chakma are a **Buddhist tribe who fled the Chittagong Hill Tracts** in erstwhile East Pakistan (now Bangladesh) after being displaced by a hydel power project

The Hajong are a **Hindu tribe who left mainland East Pakistan** due to religious persecution, and are settled in Mizoram, Meghalaya and Assam

The Chakma and Hajong entered India through present-day **Mizoram and Tripura in 1964-69, and 14,888 were settled in NEFA,** which is now Arunachal

Nearly 1.8 lakh Chakma live in Mizoram, Tripura, Assam, Meghalaya and West Bengal where they have ST status. These Chakma had been there long before the influx from East Pakistan

In 1996, in response to a writ petition filed by the NHRC, **SC ruled that the Chakma and Hajong cannot be evicted from Arunachal and their citizenship applications should be processed**

Between 1999 and 2002, **4,637 of Chakma and Hajong refugees applied for citizenship,** but have still not got it

Some descendants of the refugees have got government ID like passport and voter card based on the fact that they were born in India

1,497 Chakma and Hajong people were included on electoral rolls for the first time in 2004

In September 2015, the SC ruled **in favour of citizenship to eligible Chakma and Hajong refugees** and said they should not be discriminated against

The issue of citizenship concerns only refugees, of whom there are **only around 6,000 alive, and their kids born on or after July 1, 1987**

All Arunachal Pradesh Students' Union (AAPSU) strongly opposed the "limited citizenship' granted to the Chakma-Hajong refugees. AAPSU sought the removal of the Chakma and Hajong from Arunachal and the movement led to an end to the perks they enjoyed like government jobs and rations. They worry that refuges integration poses a demographic challenge to state composed of several small tribe which would have nega**tive impact on the indigenous people's** rights.

> PEPPER IT WITH
> Rohingya Issue, 35A, UNHRC

The grant of citizenship is in the Union list of the Constitution and can be issued by the MHA despite objections from the state government. But as normal practice the states is taken on board.

National Institutional Ranking Framework (NIRF)

The Centre has set the ball rolling for a more comprehensive ranking of higher educational institutions in the next round of the NIRF 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.

NIRF

The National Institutional Ranking Framework (NIRF) was approved by the MHRD and launched by Honourable Minister of Human Resource Development.

The methodology draws from the overall recommendations 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:

1. Teaching, Learning and Resources
2. Research and Professional Practices
3. Graduation Outcomes
4. Outreach and Inclusivity
5. Perception

AISHE Report

- The Report of the AISHE identifies and captures various aspects of all institution of Higher Education in the country. The key idea behind this Survey and resulting document is to prepare sound database on largely diverse system of Higher Education in country.
- The Survey is an ambitious step toward gathering relevant statistics that could guide state and central government in devising the future policies.
- The whole survey was conducted through online mode.

Key Finding of the survey

1. The top 6 States in terms of highest number of colleges in India are Andhra Pradesh, Maharashtra, Uttar Pradesh, Karnataka, Rajasthan and Madhya Pradesh.
2. Total enrolment in higher education has been estimated to be 2.75 million with 1.55 million boys and 1.2 million girls. Girls constitute 44% of the total enrolment.
3. Scheduled Casts students constitute 11.1% and Scheduled Tribes students 4.4% of the total enrolment. 27.6% students belong to Other Backward Classes. 3.8% students belong to Muslim Minority and 1.8% from other Minority Community Pupil Teacher Ratio (PTR) in Universities and Colleges is 26.4.

Uniformed Women in Prison Administration

Chairperson, National Commission for Women (NCW) addressed the Valedictory Session of the first National Conference on "Uniformed Women in Prison Administration" and lay emphasis on 50% women reservation in n recruitment in prison and correctional services.

Present Scenario

Women managing prisons and correctional administration are unsung heroes.

Their number is gradually increasing. From being wardens to jailers and deputies, women handle sensitive duties from managing prison gates, barracks, peripheral and internal security to sending inmates to courts and attending to judicial duties regarding prisoners.

Many states like Maharashtra now have 33 per cent reservation for women in prison administration.

During 2 day conference syndicate discussions were held on the following themes:-

1. Are Woman Prison Officers getting mainstream duties?
2. Difficulties in balancing family and work environment of Woman Prison Officers.
3. Training needs of Woman Prison Officers and Correctional Staff.
4. Is there need for change of uniform for Woman Prison Officers?

> PEPPER IT WITH
> UN Bangkok Rules, Model Prison Manual of 2016

Key Suggestions during Conference

1. It advocated separate toilets and changing rooms, creches and child support facilities and appropriate accommodation in prison premises.
2. Some flexibility of working hours was recommended for pregnant women officers and in other special cases.
3. Emphasis on Detailed Training Needs Analysis with empirical data. It proposed detailed SOPs for handling emergency situations, like – Medical emergency, Escape, Murder, Riot, Hunger Strike, etc.
4. The Staff-inmate ratio also needs to be increased as per the Mandela Rules and the UN Minimum Standard Rules for Treatment of Prisoners.

Other Topics discussed

1. Bangkok Rules and Role of Woman Prison Officers.
2. Role of Woman Prison Officers in Rehabilitation of Prisoners.
3. Gender Neutrality among Prison Officers – **A Woman's Perspective**
4. Prisoners with Special Needs (Juvenile, Transgender and Senior Citizen): Duties of Prison Officers

Way Ahead

Women now have a voice in the police. They are carrying out all types of duties — regulating traffic, managing control rooms, PCR vans, conducting night rounds, checking at nakabandi points and, above all, investigating serious crimes and supervising large bandobasts. They have come to symbolise a changing India that believes in empowered girls and women. They can be equipped with professional expertise to ensure that incidents like the custodial death of Manjula Shete in Mumbai**'s Byculla** prison do not occur. While prison administration as a whole needs attention, the issues of uniformed women in prison administration require a thorough review and follow-up action.

Swachhta Hi Seva Campaign

The President of India launched a nat**ionwide sanitation campaign** "Swachhta Hi Seva" at Iswarganj village in Kanpur. The President administered the Swachhta Hi Seva Pledge whereby the Nation resolved to create a clean healthy and new India.

Swachhata Hi Seva, Cleanliness is Service, starts from 15th September 2017 to Gandhi Jayanti on 2nd October 2017 under Swachh Bharat Mission initiative- **government's flagship for clean India.**

Key Highlights of Campaign

1. The initiative, which is being coordinated by the Ministry Of Drinking Water And Sanitation.
2. The Sawchhta Hi Seva Campaign seeks to mobilize people to come out and get directly involved with the Swachh Bharat Mission by offering shramdaan or voluntary work for swachhta in the fortnight leading upto Gandhi Jayanti.
3. . It will focus on mass mobili**sation and reinforce 'jan andolan' for sanitation to contribute to Mahatma Gandhi's dream of a clean India.**
4. It promotes construction and use of toilets in order to make their surroundings free from open defecation. It will target cleaning of public and tourist places too.
5. The ministry has made elaborate plans along with the state governments to reach out to poor and marginalised and provide them with sustainable sanitation services.

Some Facts

- In the last 3 years, under the Swachh Bharat Mission, 48,264,304 toilets were constructed. Open Defacation Free Villages reached 2,38,966. Individual toilet coverage increased from 42 percent in 2014 to 64 percent in 2017.
- Recently Shamli, Bijnor, Hapur and Ghaziabad - had been made open defecation free.
- Sikkim (became the first state), Himachal Pradesh , Kerala, Uttarakhand, Haryana are ODF

Way Ahead

The ongoing Swachhata Hi Seva campaign received a wavering response as it entered its 9th day. What began with over 2,000 volunteers on the first day was reduced to about 200 students lending a helping hand in a few parks and on railway station platforms. Though conservancy

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 23

workers played a crucial role in cleaning several prominent public spots, citizens' involvement was not high. The efforts should be made to make these campaign attractive in order to attract the masses. Eminent figures in public life should be made involved in order to attract masses and make them aware on importance of cleanliness of their surrounding and public places. Exciting competition, nukkad drama, monetary awards & prizes should be used as tools to encourage civilian to participate in Swachh Bharat Missions.

Population and Women Empowerment Policy of Assam

The Assam legislative assembly has passed a government resolution for adopting a **'Populati**on and Women Empowerment Policy of **Assam'**adopting two child norm policy with a set of incentives and disincentives.

Women Empowerment Policy of Government of India

The Ministry of Women and Child Development declared its National Policy for Women Empowerment with the goal to bring about the advancement, development and empowerment of women across the country.

PEPPER IT WITH
NPP 2000, TFR, Antara, Chhaya

Background

- The population of Assam increased to 3.12 crores with a Total Fertility Rate of 2.3.
- Assam's average family size is 5.5 which is above the National average.
- Its MMR ratio is the worst amongst all states in India at 300 (SRS2013).
- The State's infant mortality rate (IMR) is also considerably high with 54 (SRS2013).

Objectives of Policy in Assam

1. Ensure safe motherhood and reduce reproductive health system related morbidity and mortality
2. The Government also recognises that rapid population growth could severely derail progress in reaching our primary goal to achieve a high quality of life in Assam.
3. Maintain current declining trends in fertility so as to achieve a stable population size at least by the middle of the 21st Century.
4. Its goal is that every family in Assam should have access to quality education, healthcare and employment opportunities.

Roadmap of the proposed Population & Women's Empowerment Policy

- ✓ Shift from a primarily medical led policy to holistic social reform
- ✓ Encouraging behavioural change;
- ✓ Promoting Informed Choice and Participation;
- ✓ Long term Sustainability and acceptance

Major Highlights

1. Institutions to be created for Implementation of the State Population Policy like Population Resource Centre, State Population Council etc.
2. In considering the effective actions for implementing the above strategies, a system of incentives and disincentives may be considered.
3. Government servants shall strictly follow norms of two children family to serve as role models for the Society. Candidates having two children only will be eligible for govt. employment.
4. The policy seeks to bar those having more than two children from being elected or nominated to panchayat and other local bodies' elections or government jobs.
5. The two-child norm will be proposed as the yardstick for any contestant to the State Legislature and adhere to the Family Planning norms.
6. Self Help Groups having members with two children each only shall be encouraged by giving special incentives in the form of grants by the Government.
7. In order to mobilize beneficiaries for family planning at the grassroot level, special additional incentives will be provided to the ASHA Workers and Aanganwadi Workers to encourage adoption of family planning and spacing methods by eligible couples.

Way Ahead

Assam with an increasing proportion of younger, employable cohort will face an enormous challenge to meet the demands of this emerging young citizens, not only economically but also

socio-politically. Therefore, while the younger population is an advantage for us, lack of adequate planning to enhance the quality of life for this population including employment opportunities will inevitably lead to social tensions. This in itself warrants a policy that simultaneously **nurtures the state's demographic assets and prepares for the critical challenges of the future.**

Private member's bill: MPs must declare assets after tenure ends

A new private member's bill has proposed that Parliamentarians must declare their assets at the end of their tenure to ensure accountability and transparency. The Representation of The People Act (Amendment) Bill, 2017, will be presented in the Winter Session of Parliament this year with spotlight on declaration of asset after term of MP ends.

75A. Declaration of assets and liabilities (RPA 1951)

Every elected candidate for a House of Parliament shall, within ninety days from the date on which he makes and subscribes an oath or affirmation, according to the form set out for the purpose in the Third Schedule to the Constitution, for taking his seat in either House of Parliament, furnish the information, relating to—

1. the movable and immovable property of which he, his spouse and his dependent children are jointly or severally owners or beneficiaries;
2. his liabilities to any public financial institution; and
3. his liabilities to the Central Government or the State Government,

Presently

- 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 under 75A of RPA 1951.
- However, there are no such provisions for declaration of assets and liabilities after the expiry of the term.

Bill Proposition

- 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 'RPA 1951' as per the proposition moved by private member bill.

Background

- ✓ 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 per cent between two elections, and had directed the government to place the necessary information in this regard before the court.

> **RPA 1951**
> An Act to provide for the conduct of elections of the Houses of Parliament and to the House or Houses of the Legislature of each State, the qualifications and disqualifications for membership of those Houses, the corrupt practices and other offences at or in connection with such elections and the decision of doubts and disputes arising out of or in connection with such elections.
> It provides for following:
> 1. Qualification of voters.
> 2. Preparation of electoral rolls.
> 3. Delimitation of constituencies.
> 4. Allocation of seats in the Parliament and state legislatures.

- ✓ The Central Board of Direct Taxes (CBDT) later told the Supreme Court that there has been a substantial hike in the assets of seven Lok Sabha MPs and 98 MLAs across the country and "discrepancies" had been found.
- ✓ The CBDT said it would further probe the issue and place before the apex court the relevant documents relating to the assets of these lawmakers.
- ✓ It also said the names of these politicians could not be revealed and would be given to the court in a sealed cover for its perusal.

Way Ahead

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 Parliamentarians. This will also put check on the monetary-piling motivated politics for personal gains which deprive nation of its fiscal assets.

State-funding for election under a microscope

Why in News

Former Chief Election Commissioner (CEC) T S Krishnamurthy has bemoaned for state-funding of elections, and banning the use of funds by political parties for polls, as part of electoral reforms.

He suggested that the Centre should set up a National Election Fund by raising donations from various organisations. This fund should be used to meet the election-relation expense.

The move would ensure that there is no nexus between corporates and political parties with hidden agendas and curb political favouritism.

State funding of election

State funding essentially means the state shall provide funds to political parties to contest elections, and in return, there are restrictions on their accepting funds from public sources or powerful moneyed interest and keep candidate clean.

Dissension over state funding for election

1. This issue has been examined earlier by many committees: the Tarkunde Committee, the Indrajit Gupta Committee (1998), the Committee on Constitutional Reforms and the Law Commission (2015). Interestingly, none of them have unequivocally supported introduction of state funding.

2. The economic arguments against state funding are stronger. The main objection is—in a resource-starved country where 276 million live below the poverty line and where the average per capita income is bleak, is it equitable to spend such humongous sums of money on election? Limited resources should be utilised for the welfare of the largest number.

3. State funding neither prevents parties from raising funds from corporates, nor does it reduce election expenditure. It actually makes elections more expensive because parties pocket government funds and continue to raise private funding clandestinely.

Finance Bill, 2017

1. Donations to political parties by companies:
(i) the limit of 7.5% of net profit of the last three financial years, for contributions from a company has been removed, (ii) the requirement of a company to disclose the name of the political parties to which a contribution has been made.
Contribution to be made in form of a cheque, bank draft, electronic means and Electoral bonds will be issued against contribution
2. Lowering limit on cash transactions:
cash transactions above three lakh rupees will not be permitted:

> PEPPER IT WITH
> Indrajit Gupta Committee,
> Maine Clean Election Act

Acknowledgement of State funding for election

1. 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.

2. If political parties and candidates get at least a basic amount of money from the public purse this has the potential to limit the likelihood of them feeling the need to accept "interested money" from donors who want to influence their policies.

3. Public funding can increase transparency in party and candidate finance and thereby help curb corruption.

Way Ahead

This actually cuts to the heart of the problem, especially in a fiscally chaotic nation like ours with an untaxed, parallel economy the size of the legal economy (whether demonetisation can eradicate it remains). The success of state funding depends on a strong regulatory framework, stringent punishments, a quick and effective judicial system, an alert and demanding electorate and also a broad consensus on political ethics.

PM favours simultaneous LS, Assembly elections

Why in News

Recently Prime Minister floated a very pertinent idea of having simultaneous elections for the Lok Sabha and state assemblies which will allow governments to devote four years for governance and reduce the huge economic burden of frequent elections.

NITI AYOG 3 year Action Agenda (Electoral Reform)

- All elections in India should happen in a free, fair and synchronised manner so as to cause **minimum 'campaign mode' disruption to governance**.
- We may begin work towards switching to a synchronised two-phase election from the 2024 election to the Lok Sabha. This would require a maximum one-time curtailment or extension of some state assemblies.
- To implement this in the national interest, a focused group of stakeholders comprising constitution and subject matter experts, think tanks etc. should be formed to sketch implementation 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 recommended setting up of a working group.

> PEPPER IT WITH
> Model Code of Conduct, EC, Anti-Defection Law

Simultaneous Elections

It is ideally defined as structuring the Indian election cycle in a manner that elections to Lok Sabha and State Assemblies are in synchronized and coordinated fashion. In such a scenario, a voter would normally cast his/her vote for electing members of Lok Sabha and State Assembly on a single day and at the same time.

Adverse impacts of the existing electoral cycle

1. Impact on development programs and governance due to imposition of Model Code of Conduct by the Election Commission

    The imposition of Model Code of Conduct (MCC) puts on hold the entire development programme and activities of the Union and State Governments in the poll bound State. It even affects the normal governance. Frequent elections lead to imposition of MCC over prolonged periods of time. This often leads to policy paralysis and governance deficit.

2. Frequent elections lead to massive expenditures by Government and other stakeholders

3. Engagement of security forces for significantly prolonged periods

4. Frequent elections disrupt normal public life

5. Frequent elections adversely impact the focus of governance and policy making

Key criticisms of Simultaneous Elections

- Operational feasibility / Do-ability
- Impact to voter behavior *(This situation could lead to National issues impacting electorate's behavior for voting in State Assembly elections)*
- Requirement of EVMs (Balloting Units and Control Units) is likely to increase considerably

Benefits of Simultaneous Elections

Check on unnecessary expenditure:

The entire expenditure on actual conduct of elections to Lok Sabha is borne by Government of India and such expenditure on conduct of election to State Legislatures by the respective State Governments when such elections are held independently. When Simultaneous Elections held expenditure like expenditure on regular election establishment, preparation and revision of electoral roll etc. can be shared 50:50.

Limited engagement of Security:

The requirement of personnel and security will decrease as the the number of polling stations will be common for all three tier of election.

Limited disruption normal public life:

If simultaneous elections are held, this period of disruption would be limited to a certain pre-determined period of time. For instance involvement of govt. employee and govt. school as polling station disrupting education sector etc.

Way Ahead

As is the case with long-term structural reforms, implementing this measure would also cause some short-term pain. However, this would be a stepping stone towards improved governance **and a larger initiation of "electoral reforms" –** a desperately needed measure to re-boot the Indian polity.This flexibility is not just an enabling tool but in fact a responsibility on Governments to provide the best governance systems, processes and opportunities to its citizens.

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). India is home to 25 percent **of the world's hungry population.**

Key Highlights

✓ The Indian Council of Medical Research (ICMR), the Indian Council of Agriculture Research (ICAR), the M S Swaminathan Research Foundation, the Biotechnology Industry Research Assistance Council (BIRAC) are planning to initiate a Zero Hunger Programme.

✓ The programme will consist of the following items:
1. Organisation of Farming System for Nutrition (FSN)
2. Organisation of Genetic Gardens Biofortified Plants
3. Initiation of a Zero Hunger Training programme

> A Genetic Garden Biofortified Plants contains the germplasm of naturally bio fortified 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.

✓ 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.

International outlook & Zero Hunger Challenge

The Zero Hunger Challenge was launched by United Nations Secretary-General Ban Ki-moon in 2012 at the UN Conference on Sustainable Development (Rio+20) in Brazil. Five Pillars of the Zero Hunger Challenge are:
1. Zero stunted children less than 2 years
2. 100% access to adequate food all year round
3. All food systems are sustainable
4. 100% increase in smallholder productivity and income
5. Zero loss or waste of food

> PEPPER IT WITH
> 2030 Agenda, National Food Security Act, 2013, SDG-2

The mission of the Zero Hunger Challenge is to bring together all stakeholders to communicate the importance of food security, nutrition and inclusive, sustainable and resilient agriculture to deliver on the promise of the 2030 Agenda, and to encourage, engage, accelerate and amplify collective action to create food systems that deliver for all people

The Zero Hunger vision reflects five elements from within the SDGs, which taken together, can end hunger, eliminate all forms of malnutrition, and build inclusive and sustainable food systems.It has encouraged all to work together towards ending hunger in alignment with 2030 Agenda.

Five Elements From Within the SDGs pictorially depicted

Present Scenario

The Government of India has evolved several social safety nets to address these challenges: the Public Distribution System; the Antodaya Anna Rozgar Yojana, the Mid day Meal Scheme; the MGNREGA and most recently in 2013, the landmark Food Security Act which aims to

provide subsidized foodgrain to up to 75 percent of the rural population and 50 percent of urban households.

Way Ahead

Eliminating hunger involves investments in agriculture, rural development, decent work, social protection and equality of opportunity. It will make a major contribution to peace and stability and to the reduction of poverty. It will contribute to better nutrition for all – especially women from the beginning of pregnancy and children under the age of two.

The Whistle Blowers Protection (Amendment) Bill, 2015

Commonly known as the Whistleblower's Act, it seeks to establish a mechanism to register complaints on any allegations of corruption, or wilful misuse of power against a public servant or unethical conduct within organisation. The Act also provides safeguards against victimisation of the person who makes the complaint.

The amendment bill seeks to remove the clause which safeguards whistleblowers from prosecution under the Official Secrets Act (OSA) if they make a disclosure under Whistleblowers Protection Act.

> PEPPER IT WITH
> Lokpal & Lokayuktas Act, 2013

Highlights of the Act

1. The Bill amends the Whistleblowers Protection Act, 2014.
3. The Act provides a mechanism for receiving and inquiring into public interest disclosures against acts of corruption, wilful misuse of power or discretion, or criminal offences by public servants.
4. The Bill prohibits the reporting of a corruption related disclosure if it falls under any 10 categories of information.
5. These categories include information related to: (i) economic, scientific interests and the security of India; (ii) Cabinet proceedings, (iii) intellectual property; (iv) that received in a fiduciary capacity, etc.
6. The Act permits disclosures that are prohibited under the Official Secrets Act (OSA), 1923. The Bill reverses this to disallow disclosures that are covered by the OSA.
7. Any public interest disclosure received by a Competent Authority will be referred to a government authorised authority if it falls under any of the above 10 prohibited categories. This authority will take a decision on the matter, which will be binding.

Key Issues and Analysis

- The Central and State Vigilance Commissions shall be the nodal body to receive complaints from whistleblowers. However, their power is restricted to recommend corrective action to the public authority (including any penal action) on public officials after investigation.
- The power of the CVC is limited to making recommendations. Also it does not have any power to impose penalties. This is in contrast to the powers of the Karnataka Lokayukta and the Delhi Lokayukta.
- A Competent Authority is required to refer a prohibited disclosure to a government authority for a final decision. However, the Bill does not specify the minimum qualifications required or the process of appointment of this authority.
- Whistleblower laws in other countries also prohibit the disclosure of certain types of information. These include information related to national security and intelligence, received in a fiduciary capacity, and any disclosure specifically prohibited by a law

Way Ahead

Although the Act makes a provision for Anonymous Disclosures, the Competent Authority formed under the Act does not talk about complete anonymous disclosure. The Act makes provision for revealing the identity of the Whistleblower. If this is done there are chances of the whistleblower being victimized. The syndicates feels that what can be done in this case is that a

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 29

separate Whistle Blower Protection Agency can be formed under the Whistle Blower Protection Rules so as to provide protection to Whistleblowers by assessing the danger which the whistleblower is susceptible to by making the disclosure. The suggestion to incorporate and make use of the Lokpal is very promising.

Table 3: Comparison of the Law Commission Report and the Bill

	Law Commission of India	Bill
Scope	Disclosure can be against Minister and public servant.	Disclosure can be only against public servant.
Definitions	Defines disclosure as a complaint against abuse or misuse of power; commission of an offence under any law; or mal-administration.	Defines disclosure as a complaint against a public servant on commission of an offence under the Prevention of Corruption Act, 1988 or misuse of power leading to demonstrable loss to the government or gain to the public servant; or a criminal offence.
	Defines victimisation.	No definition.
Disclosure of Identity	The name of person making the disclosure shall be revealed to the public servant unless the complainant requests that his identity be kept hidden or it is necessary in public interest.	The Vigilance Commission shall not reveal the identity of the complainant to the head of the organisation except if it is of the opinion that it is necessary to do so.
Powers of Competent Authority	The Competent Authority has the power to direct the appropriate authority to initiate criminal proceedings against the guilty official.	The Vigilance Commission has the power to recommend measures such as initiating proceedings and taking steps to redress the loss to the government.
Time limit	The Competent Authority has to complete the inquiry within 6 months to 2 years after receiving the complaint.	No time limit prescribed for discreet inquiry. Time limit for explanation to be given by the concerned head of department shall be prescribed.
Burden of proof	In case a complainant is victimised the burden of proof is on the employer or public servant who is accused of victimisation.	No provision.
Penalty	Penalty for false complaints is imprisonment upto 3 years and fine of upto Rs 50,000.	Penalty for false complaints is imprisonment upto 2 years and fine of upto Rs 30,000.

Sources: 179th Law Commission Report, Bill 2010, PRS.

Pradhan Mantri LPG Panchayat

The Ministry of Petroleum and Natural Gas recently launched Pradhan Mantri LPG Panchayat initiative aimed at encouraging rural communities to turn to clean fuel and to boost Pradhan Mantri Ujjwala Yojana (PMUY).

Key Highlights

1. The LPG Panchayat is an interactive communication platform aimed at educating rural LPG users about proper safety precautions on use of LPG, its sustainable usage of LPG, its benefits and linkages between using clean fuel and its effect on women empowerment and health.
2. The Centre plans to organise one lakh LPG Panchayats across the country, where discussions will take place between officials of fuel companies and villagers on awareness and uses of the LPG.
3. The panchayats will also include safe practices, quality of service provided by distributors and availability of refill cylinders.

About PMUY

✓ The scheme is being implemented by the Ministry of Petroleum and Natural Gas.
✓ PMUY aims to safeguard the health of women & children by providing them with a clean cooking fuel – **LPG, so that they don't have to compromise their health in** smoky kitchens or wander in unsafe areas collecting firewood.
✓ Under this scheme, 5 Cr LPG connections will be provided to BPL families with a support of Rs.1600 per connection in the next 3 years.
✓ Identification of the BPL families will be done through Socio Economic Caste Census Data. Rs. 8000 Cr. has been allocated towards the implementation of the scheme.
✓ Launch of this scheme will also provide a great boost to the **'Make in India'** campaign as all the manufacturers of cylinders, gas stoves, regulators, and gas hose are domestic.

Sahaj Bijli Har Ghar Yojana "Saubhagya"

The Prime Minister has launched a new scheme Pradhan Mantri Sahaj Bijli Har Ghar Yojana –**"Saubhagya"** to ensure electrification of all willing households in the country in rural as well as urban areas.

Objective

The objective of the 'Saubhagya' is to provide energy access to all by last mile connectivity and electricity connections to all remaining un-electrified households in rural as well as urban areas to achieve universal household electrification in the country.

Key Highlights

✓ 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.

✓ The States and Union Territories are required to complete the works of household electrification by the 31st of December 2018.

✓ The total outlay of the project is Rs. 16, 320 crore while the Gross Budgetary Support (GBS) is Rs. 12,320 crore.
  - ▪ Rural Household
    Rs. 14,025 crore fund & GBS is Rs. 10,587.50 crore
  - ▪ For Urban Household
    Rs. 2,295 crore fund & GBS is Rs. 1,732.50 crore

✓ The Rural Electrification Corporation Limited (REC) will remain the nodal agency for the operationalisation of the scheme throughout the country.

> **GBS**
> *Definition:* The government's support to the Central plan is called Gross Budgetary Support.
> *Description:* The Central plan forms the annual expenditure of the government and is incurred keeping the objectives of 5-year plans in mind. Budgetary Support is earmarked for meeting the planned outlays of the Central government during the financial year.

Implementation of the Scheme

1. For easy & accelerated implementation of the Scheme , modern technology shall be used for household survey by using Mobile App.
2. Beneficiaries shall be identified and their application for electricity connection along with applicant photograph and identity proof shall be registered on spot.
3. Dumping Duty: Earlier govt. was scared that the solar and wind tariff will become higher and they will turn into non-performing asset. But the govt. realised that larger percentage is ready to be shifted towards prepaid electricity connection.
4. Under this scheme subsidies will be provided to poor and villagers on equipment like meters, transformer and wires.

The expected outcome of the Scheme is as follows:
  - (a) Environmental upgradation by substitution of Kerosene for lighting purposes
  - (b) Improvement education services
  - (c) Better health services
  - (d) Enhanced connectivity through radio, television, mobiles, etc.
  - (e) Increased economic activities and jobs
  - (f) Improved quality of life especially for women

Comparison with earlier programme of GoI '24x7 Power For All'

'24x7 Power for All' is a joint initiative with the states covering all segments of power sector i.e. Power generation, transmission and distribution, energy efficiency, health of Discom etc. to finalise State/UT specific roadmap and action plan to ensure 24x7 power for all in consultation with States/UTs. The Power for All documents contain details of various interventions required across the value chain of power sector.

Providing connectivity to all households is a prerequisite to ensure 24x7 power supply. Saubhagya is a schematic support to address the issue of energy access.

PENCIL (Platform for Effective Enforcement for No Child Labour)

Ministry of Labour and Employment recently launched a web portal called 'PENCIL' for effective implementation of National Child Labour Project (NCLP) for enforcement of no child labour.

About PENCIL

✓ PENCIL is an electronic platform that aims at involving Centre, State, District, Governments, civil society and the general public in achieving the target of child labour free society.

✓ The Ministry also launched the Standing Operating Procedures (SOPs) for the enforcement of legal framework against child labour.

✓ The PENCIL Portal has various components, namely Child Tracking System, Complaint Corner, State Government, National Child Labour Project and Convergence.

Key Highlights

1. The Labour Minister stated that India ratified the two Core Conventions of International Labour Organization (ILO), Convention 138 regarding admission of age to employment and Convention 182 regarding worst forms of Child Labour in June 2017 which shows our commitment to a child labour free nation.

2. Ministry of Labour &Employment, said that Government has taken various initiatives and developed a legal framework to achieve the Sustainable Development Goal (SDG) of eliminating child labour by the year 2025.

3. For the first time we have provided for prevention, rescue and rehabilitation of children in the central rules and institutional set up at the district level in the form up district task force.

4. The Districts will nominate District Nodal Officers (DNOs) who will receive the complaints and within 48 hours of receiving, they will check the genuineness of the complaint and take the rescue measures in coordination with police.

5. The SOP is aimed at creating a ready reckoner for trainers, practitioners and monitoring agencies to ensure complete prohibition of child labour and protection of adolescents from hazardous labour ultimately leading to Child Labour Free India.

Way Ahead

The genesis of the portal is in the felt need to create a robust implementing and monitoring mechanism for both enforcement of the legislative provisions and effective implementation of the NCLP especially in the backdrop that the subject of labour is in the concurrent list and enforcement to a large extent depends on respective state governments.

Government has taken several initiatives subsequent to the enactment of the Child Labour (Prohibition and Regulation) Amendment Act, 2016 to strengthen the governance of the legislative provisions. This include Framing of State Action Plan and circulating to all States/ UTs for enforcement of the Amended Act.

NCLP

Objective

The Scheme seeks to adopt a sequential approach with focus on rehabilitation of children working in hazardous occupations & processes in the first instance.

Under the Scheme, survey of child labour engaged in hazardous occupations & processes has been conducted, identified, withdrawn and rehabilitated.

Target Group

- All child workers below the age of 14 years in the identified target area.
- Adolescent workers below the age of 18 years in the target area engaged in hazardous occupations / processes.
- Families of Child workers in the identified target area.

PEPPER IT WITH
ILO, Operation Smile

CARA launched "Jan Sampark" Program

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.

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 were shared with all the stakeholders. Also many of the PAPs were counselled and motivated to go for adopting older children.

ADOPTION REGULATIONS 2017

Adoption Regulations, 2017 framed by 'Central Adoption Resource Authority' (CARA) as mandated under section 68 (c) of Juvenile Justice (Care and Protection of Children) Act, 2015 recently came into effective. The Adoption Regulations, 2017 will replace the Adoption Guidelines, 2015.

Who can adopt?

Resident and non-resident of India are eligible for adoption with more priority and preference to Indian citizens.

Eligibility criteria for prospective adoptive parents:
a) at least two years of a stable marital relationship;
b) a single male will not be eligible to adopt a girl child; and
c) Minimum age difference of 25 years between the child and either of the prospective adoptive parents.

CARA
- Central Adoption Resource Authority (CARA) is a statutory body of Ministry of Women & Child Development.
- 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.

CARINGS
- An online information system for facilitating, guiding and monitoring the adoption programme.
- A centralized data bank of adoptable children and PAPs

Key Highlights

1. All adoptions shall be registered on Child Adoption Resource Information and Guidance System and the confidentiality of the same shall be maintained by the Authority.

PEPPER IT WITH
Childline, Juvenile Justice Act 2015, Hague Abduction Convention

---

2. District Child Protection Unit.-
   a) Identify orphan, abandoned and surrendered children in the district and get them declared legally free for adoption by Child Welfare Committee with the help of Specialised Adoption Agency or Child Care Institution.
   b) Maintain a panel of professionally qualified or trained social workers and set up counseling centre with support of State Adoption Resource Agency or the Authority to assist Specialised Adoption Agency or Child Care Institution.
3. CARA shall be facilitating all adoptions under the JJ Act, 2015through Child Adoption Resource Information & Guidance System (CARINGS) and all kinds of adoptions, including adoptions by relatives shall be reported to CARA which would enable safeguard.
4. Wherever District Child Protection Unit is not functional, the District Magistrate concerned shall get such advertisement issued.
5. The time period available to the domestic PAPs for matching and acceptance, after reserving the child referred, has been increased to twenty days from the existing fifteen days.

Hague Adoption Convention
- It means the Hague Convention on Protection of Children and Cooperation in Respect of Inter-country Adoption (1993).
- The Convention provides a framework for the process of inter-country adoptions which is aimed at protecting the best interests of the child and establishes a system of co-operation between contracting countries to prevent the abduction, sale, or the trafficking of children.

Way Ahead
Major concerns with regard to protection and participation include:

(i)large number of child labourers; (ii) rise in trafficking of children; (iii) large number of girls being married before the legal age; and (iv) lack of information among children about their own rights and entitlements. The NAPC 2016 aims to protect all children from all forms of violence and abuse including economic and sexual exploitation, abandonment, separation, abduction, sale or trafficking. Further, it aims to enable children to be actively involved in their own development and in all matters concerning them.

Rohingya petitions in SC against deportation

A petition challenging government's decision to deport illegal Rohingya Muslim immigrants back to Myanmar was filed in Supreme court. The petition has challenged the decision on various grounds including that it violated international human right conventions.

Violent attacks allegedly by Myanmarese armymen have led to an exodus of Rohingya tribals from the western Rakhine state in that country to India and Bangladesh. Many of them, who had fled to India after the earlier spate of violence, have settled in Jammu, Hyderabad, Haryana, Uttar Pradesh, Delhi-NCR and Rajasthan.

Why they shouldn't be deported

Proposed deportation is contrary to the constitutional protections of Article 14 (Right to Equality), Article 21 (Right to Life and Personal Liberty) and Article 51(c) of the Constitution of India, which provides equal rights and liberty to every person. This act would also be in contradiction with the principle of **'Non-Refoulement'**, which has been widely recognised as a principle of Customary International Law.

The petition said that India has ratified and is a signatory to **various conventions that recognise the Principle of "Non-Refoulement', which prohibits deportation of refugees to a** country where they may face threat to their lives. The principle of non-refoulement – or not sending back refugees to a place where they face danger – is considered part of the Customary International Law and is binding on all states whether they have signed the Refugee Convention or not.

> PEPPER IT WITH CITIZENSHIP Bill, 2015, Search Results
> UNHCR Refugee Convention (1951)

Government stand

- Government told the apex court that the presence of Rohingyas in the country posed national security threats while pointing out that intelligence inputs suggested links of some Rohingya immigrants with Pak-based terror groups.
- It also told the SC that the decision whether or not to allow refugees to settle in the country was best left to the Executive. The Centre Rohingyas have entered from Myanmar using porous border between India and Myanmar. The total number of such illegal immigrants into our country would be more than 40,000 approximately.
- In reply the Rohingyas offered themselves to be individually screened for terror elements, comparing their condition to how the Tamil Nadu government had filtered Sri Lankan Tamil refugees, fleeing the war and unrest in the island nation during the 1980s, in order to identify LTTE members.

> Operation Insaniyat-Humanitarian assistance to Bangladesh on account of influx of refugees.
> In response to the humanitarian crisis being faced on account of the large influx of refugees into Bangladesh, Government of India has decided to extend assistance to Bangladesh. The relief material consists of items required urgently by the affected people, namely rice, pulses, sugar, salt, cooking oil, tea, ready to eat noodles, biscuits, mosquito nets etc.

Bangladesh stand

As estimated by IOM (International Organisation for Migration), in a three week time, over 430,000 Rohingya entered Bangladesh. They are fleeing 'ethnic cleansing' in their own country where they have been living for centuries.

Bangladesh Prime Minister Sheikh Hasina has floated a five-point proposal at the United Nations to find a permanent solution to the Rohingya crisis.

Hasina's five-point proposal says:

1. Myanmar must stop the violence and the practice of ethnic cleansing in the Rakhine State unconditionally, immediately and forever.

2. UN Secretary General should immediately send a fact-finding mission to Myanmar.
3. all civilians, irrespective of religion and ethnicity, must be protected in Myanmar and for this, 'safe zones' could be created inside Myanmar under UN supervision.
4. sustainable return of all forcibly displaced Rohingyas in Bangladesh to their homes in Myanmar must be ensured.
5. the recommendations of the Kofi Annan Commission Report must be implemented immediately, unconditionally and entirely.

Bangladesh has sought help from India, China and Southeast Asian countries to help implement **Sheikh Hasina's five**-point Rohingya solution proposals. The role of ASEAN and the Organisation of Islamic Countries (OIC) will be critical in ensuring support for the Rohingya.

Way forward

The continuing failure of the Myanmar government to act decisively and urgently to protect **civilians from the raging crossfire between the security forces and insurgents is shocking. UN's** International Organisation for Migration has called for additional aid to cope wit**h Dhaka's** refugee situation. Ms. Suu Kyi who is not just the foreign minister but also a Nobel peace prize winner has failed to exert any moral pressure to secure humane treatment and humanitarian assistance for the systematically persecuted Rohingya. She has rightly come under criticism for her continued silence over the army brutalities.

The radical Buddhist nationalists, who have traditionally resisted recognition of the Rohingya as citizens of Myanmar, have rubbished the findings of the officially appointed Advisory Commission on Rakhine State, headed by former UN Secretary General Kofi Annan. The Myanmar government has an obligation to act on the recommendations of the Commission, on the guarantee of citizenship rights to the Rohingya, freedom of movement and enforcement of **the rule of law. It is inconceivable that the country's yearning for peace and normal life could be** fulfilled in the absence of these minimum prerequisites. The ruling National League for Democracy, which takes legitimate pride in its heroic defiance of the military junta, has a largely unfinished agenda on democratic transition. Enormous powers are vested in the military. The further consolidation of the hard-won freedoms from dictatorship will remain an arduous task so long as a large minority of the population is systematically excluded from the political process. Hence Ms Suu Kyi should break her silence and Myanmar should immediately execute the recommendation of Kofi Annan Commission.

9th BRICS Summit

The BRICS annual summit was held in Xiamen, China, and was attended by Brazil, Russia, India, China and South Africa. The theme of the five-member **group's 9th**summit was **"BRICS: Stronger Partnership for a Brighter Future."** The summit was particularly significant as it was held against the backdrop of recent border discord in the Doklam area in the Himalayas between India and China.

The Xiamen Declaration was signed by the members during the summit and it emphasized that BRICS, as a **forum, has "fostered the spirit of mutual respect an**d understanding, equality, solidarity, openness, **inclusiveness and mutually beneficial cooperation,"** among the members and reiterated the shared desire for **"peace, security, development and cooperation."**

Five guest countries — Egypt, Tajikistan, Thailand, Mexico and Guinea — also attended the dialogue.

Highlights

1. One of the major highlights of the summit from **India's point of view was that for the first time the group's declaration specifically named Pakistan**-based terror groups like Lashkar-e-Taiba (LeT), Jaish-e-Mohammad (JeM) and the Haqqani network.
2. The Joint Declaration condemning terrorism stated **"concern on the security situation in the region and** violence caused by the Taliban, ISIL/DAISH, Al-Qaida and its affiliates including Eastern Turkistan Islamic Movement, Islamic Movement of

Xiamen Declaration
Four documents were signed at the **BRICS leaders' meeting in the** Chinese city of Xiamen. They are:
1. BRICS action agenda on economic and trade cooperation
2. BRICS action plan for innovation cooperation (2017-2020)
3. Strategic framework of BRICS customs cooperation
4. Memorandum of understanding between the BRICS Business Council and the New Development Bank on strategic cooperation.

Uzbekistan, the Haqqani network, Lashkar-e-Taiba, Jaish-e-Mohammad, TTP and Hizbut-Tahrir."

3. **The statement mentioned that "we deplore all terrorist attacks worldwide**, including attacks in BRICS countries, and condemn terrorism in all its forms and manifestations wherever **committed and by whomsoever" and emphasized that "those responsible for committing,** organized, or supporting terrorist acts must be held accountable**."**

> Pepper it with New Development Bank, BRICS rating agency

Salient points from the Xiamen Declaration:
- ✓ Besides naming terror groups responsible for violence and causing concern, Brics called for a comprehensive approach to combat terrorism, including countering radicalisation, recruitment, movement of terrorists, supply of weapons and money laundering.
- ✓ Working 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.
- ✓ Commitment to promote green development and low-carbon economy in the context of sustainable development and poverty alleviation.
- ✓ Enhancing Brics anti-corruption cooperation and supporting the strengthening of international cooperation against corruption.
- ✓ BRICS strongly deplored the latest nuclear test conducted by North Korea, and expressed deep concern over the ongoing tension and prolonged nuclear issue on the Korean Peninsula.

Modi's 10 'noble commitments' for BRICS
- Prime Minister recently pitched for a coordinated action on counter-terrorism, cybersecurity and disaster management, as he suggested 10 "noble commitments" through which BRICS could achieve leadership in global transformation.
- The 10 noble commitments suggested by the Prime Minister included creating a safer world by "organised and coordinated action on at least three issues: counter-terrorism, cybersecurity and disaster management."
- Other noble commitments suggested was of creating a greener world, creating an enabled world, creating an inclusive world, creating a digital world, creating a skilled world, creating a healthier world, creating an equitable world, creating a connected world and creating a harmonious world.

Indian Prime Minister and the Chinese President meeting

On the last day of the summit, Indian Prime Minister Narendra Modi and the Chinese President Xi Jinping met on the sidelines for their first substantive bilateral meeting post-Doklam. It was a forward-looking conversation with an emphasis on "peace and tranquility on border areas." Both the sides felt that there should be "closer communication between the defense and security personnel of India and China

Later, China's Foreign Ministry spokesperson Geng Shuang's argued that during the meeting Xi stressed the need for "sound and stable" China-India relations. Xi emphasized that China and India are "each other's important neighbor" and should focus on "seeking common ground while shelving differences and uphold peace and tranquility in our border areas" to bring the bilateral relationship "on a right track," under the **"guidance of Five Principles of Peaceful Coexistence."**

> The reference to the **"Five Principles of Peaceful Coexistence" or Panchsheel** Agreement was particularly interesting, as an attempt to mend bilateral ties after the Doklam faceoff. The five principles, as per the Panchsheel agreement which the two countries had signed on April 29, 1954, are: mutual respect for each other's territorial integrity and sovereignty, mutual non-aggression, mutual non-interference, equal and mutual benefit and peaceful coexistence.

Way Forward
The BRICS declaration at Xiamen, that included a paragraph on terror has been hailed as a major shift of **China's policy of protecting** Pakistan based groups. However, experts point out that the reference to the Jaish-e-Mohammad (JeM) and Lashkar-e-Taiba (LeT) is not a first for Beijing, and must be reinforced by a bilateral commitment on terrorism by both countries.

Page 36

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

The statement should translate into China removing its block on designating the JeM chief Masood Azhar as a U.N. Security Council sanctioned terrorist when its current hold on the process at the UNSC expires on November 1 this year.

India and China, being the two largest economies of the BRICS, are the group's most crucial members. For a long time trade and economics have been the key drivers of their bilateral relationship, while tricky geopolitical issues have continued to overshadow more productive aspects of their relationship at times. Recurrent tension over the issues like Doklam, which is **set aside for now, China's One Belt One Road (OBOR) initiative, and India's reservations over** the China Pakistan Economic Corridor (CPEC), continue to remain major irritants in the bilateral relationship. However, during the 2017 BRICS summit the two side displayed significant diplomatic maturity, creating space despite difference for multilateral cooperation on broad range of issues, enabling what was termed as successful and productive summit.

UNSC unanimously votes to step up sanctions against North Korea

The United Nations Security Council unanimously stepped up sanctions against North Korea recently over the country's 6th and most powerful nuclear test conducted in September, 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.

A tougher initial U.S. draft was weakened to win the support of Pyongyang ally China and Russia.

- It also stated that sanctions will be lifted once North Korea stops its nuclear program, and if North Korea continues its dangerous path, then further pressure will be put.

> Pepper it with
> Hydrogen bomb
> Nuclear fission and fusion

- North Korea is now banned from exporting textiles — its second-biggest export after coal and other minerals in 2016, totaling $752 million, according to data from the Korea Trade-Investment Promotion Agency. Nearly 80 percent went to China.
- The resolution imposes a ban on condensates and natural gas liquids, a cap of 2 million barrels a year on refined petroleum products, and a cap on crude oil exports to North Korea at current levels. China supplies most of North Korea's crude.
- The resolution also calls on states to inspect vessels on the high seas, with consent of the flag state, if they have reasonable grounds to believe the ships are carrying prohibited cargo.

Reaction by other countries

- ✓ Russia had condemned the idea of tightening sanctions on North Korea without any political push to resolve the crisis.
- ✓ China called for a resumption of negotiations "sooner rather than later." It called on North Korea to "take seriously" the will of the international community to halt its nuclear and ballistic missile development.
- ✓ Japan said that it was important to change North Korea's policy by imposing a higher level of pressure on the country than ever before.

India's stand

1. India said that it "deplores" North Korea's latest nuclear test, calling it a matter of deep concern that DPRK [Democratic People's Republic of Korea] has once again acted in violation of its international commitments.

> **Background**
> - North Korea fired an intermediate-range missile over Japan into the northern Pacific Ocean, its longest-ever such flight and a clear message of defiance for its rivals.
> - The missile was launched from Sunan, **Pyongyang's international airport and** the origin of the earlier missile that flew over Japan.
> - **That missile is linked to North Korea's** declaration that it means to contain the U.S. Pacific island territory of Guam, which is the home of important U.S. military assets and appears well within the Hwasong-**12's range.**

2. New Delhi also hinted at at its concern about North Korean nuclear missiles falling into the wrong hands, saying, "India also remains concerned about the proliferation of nuclear and missile technologies which has adversely impacted India's national security."

3. **India sought a probe into North Korea's nuclear proliferation linkages, and demanded** that those responsible for it should be held accountable, in a veiled reference to Pakistan.

Way forward

North Korea relies on increasing militarisation and show of missile and nuclear prowess for various reasons. Part of its ploy is to convince its impoverished and isolated citizenry of the need for the country to attain military parity in light of the presence of the U.S. military shield in South Korea and Japan. The unpalatable prospect of the escalation of a possible military conflict into a nuclear war is also a way to stave off any external intervention against the dictatorship, the likes of which were seen in Iraq and Libya.

In light of all this, it is important to de-escalate the conflict by having direct talks involving the U.S., China, South Korea and North Korea. Multilateral talks are, in fact, by far the best option.

India Japan sign open sky agreement

India and Japan recently agreed to an open sky arrangement under which the airlines of both countries can operate an unlimited number of flights.

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 km radius from New Delhi.

Significance

The move is ought to increase air travel and tourism between the two countries. It will also lead to reduction in price of air tickets. 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.

Pepper it with
International Civil Aviation Negotiations (ICAN) - 2016
National civil aviation policy 2016

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).

Open Sky Agreement

1. **Under the National Civil Aviation Policy, India intends to enter into 'open-sky' agreements** with SAARC countries and with those beyond the 5,000-km radius from Delhi.
2. Countries sign air services agreements (ASAs) through bilateral negotiations to decide the **number of flights airlines can fly. Under the 'open-sky' agreement, there is no restriction on** flights or seats.
3. **Among SAARC countries, India doesn't have any 'open sky' agreement with Pakistan, Nepal** and Afghanistan. It allows unlimited flights from Bangladesh and Maldives at 18 domestic airports, from Sri Lanka at 23 airports, and from Bhutan at all its airports.

U.S. resumes premium processing of H-1B visas

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

In addition to resumption of premium processing for H-1B via petitions subject to the FY 2018 cap, USCIS previously resumed premium processing H-1B petitions filed on behalf of physicians under the Conrad 30 waiver programme, as well as interested government agency waivers and for certain H-1B petitions that are not subject to the cap.

Pepper it with
Conrad 30 waiver programme, Deferred Action for Childhood Arrivals (DACA)

Issue

President Donald Trump promised to end the misuse of visa programmes by companies to undercut American workers, referring to an incident that involved Indian companies and IT professionals on H1-B visas.

A Bill backing key changes in the H1-B visa programme that allows skilled workers from other countries to fill jobs in the U.S. has been reintroduced in Congress. The Bill comes after a

Page 38

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

number of companies — Disney, SoCal Edison and others — have come under fire for abusing the programme.

- Bill prohibits companies from hiring H1-B employees if they employ more than 50 people and more than 50 per cent of their employees are H1-B and L-1 visa holders.
- The Bill encourages companies to recruit American workers.
- It explicitly prohibits replacement of American workers by H1-B or L-1 visa holders.
- The Bill seeks to give the Department of Labour enhanced authority to review, investigate and audit employer compliance as well as to penalise fraudulent or abusive conduct.
- The Bill seeks to increase the minimum salary of H1-B visa holders to $1,00,000 per annum
- Currently, firms need not go through extensive paperwork if the potential H1-B employee has an equivalent of a **Master's degree or higher and he or she is paid at least** $60,000 annually. The Bill aims to do away with the **Master's degree exemption (as "the**y are easily obtained by **foreign workers").**

The American President said that his administration will follow a simple rule — buy American, hire American.

India has alleged that the US is violating its obligations under General Agreement on Trade in Services (GATS), a binding agreement for all WTO member countries, as well as the GATS Annex on Movement of Natural Persons Supplying Services, to not discriminate against or between non-US service providers.

How it will affect India

The Indian IT industry believes that this Bill does not address the root cause of the problem – shortage of STEM skills (or those in the areas of Science, Technology, Engineering and Math) in the U.S.

There is a perception that companies pay low salaries to people who are sent to work on these visa. High-skilled IT workers on temporary visas earn competitive salaries and cost their employers as much or more than their American counterparts Apart from the visa curbs, the U.S. had also recently hiked the visa fee for certain categories of the H1-B and L1 visas which has had an impact on Indian companies.

About H1B visa

The H-1B visa is a non-immigrant visa that allows U.S. 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.

Way forward

A vast number of Indians have contributed very significantly to the growth of software in America. America has all along talked about open trade. America is what it is because of open trade, because of its ability to attract best talent from across the world. All countries which have prospered whether it is Japan, Korea, China, America itself have grown because of open trade.

Such embargoes or restrictions will weaken America as input cost will rise enormously and the goods produced will become expensive for consumers.We are in a world of open trade, one part **of a world can't close, we are globalised, one can't reverse it back again.**

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.
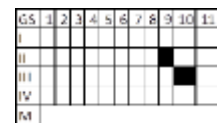
At the 17th BIMSTEC Senior Officials Meeting held in Kathmandu, Nepal it was decided that India would organize the first annual Disaster Management Exercise for the region.

Pepper it with
Act east policy
Kaladan multi modal project

Significance

1. 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.

BIMSTEC member: five deriving from South Asia, including Bangladesh, Bhutan, India, Nepal, Sri Lanka, and two from Southeast Asia, including Myanmar and Thailand.
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

2. It will help create synergy and synchronize efforts to institutionalize regional cooperation among the member countries.

3. 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.

4. India has been at the forefront of DRR efforts by hosting the South Asian Annual Disaster Management Exercise (SAADMEx) and the Asian Ministerial Conference for Disaster Risk Reduction (AMCDRR). India has also offered its expertise and capabilities in DRR such as the South Asia satellite, GSAT-9, and the Tsunami Early Warning Centre to other countries.

5. Disaster Management was one of the important Agenda items the BIMSTEC leaders deliberated upon during the Goa BRICS Summit in October last year where BIMSTEC leaders were the Special Invitees.

UN human rights review

The Universal Periodic Review (UPR) is a process established by the Geneva-based UN Human Rights Council (HRC), under which the human rights record of each of the **UN's 193 member countries is peer**-reviewed every four or five years. The UN created the HRC in 2006 after several member countries complained that its predecessor, the Human Rights Commission, was vulnerable to bullying by powerful countries (such as the US) which prevented, obfuscated or **filibustered the review of their friends and allies (such as Israel). Under the HRC's UPR, every** country has the opportunity to make recommendations on every other cou**ntry's human rights** record. The first UPR took place in 2008, the second in 2012, and the third is scheduled in 2017. Indian delegation on UPR comprised of Attorney general of India and officials from the Ministries of External Affairs, Home, Women & Child Development, Social Justice & Empowerment, Minority Affairs and Rural Development, and the NITI Aayog. Ahead of the meeting, the world community made 250 recommendations to India to improve its human rights record. These were made to a **"troika"** of countries responsible for India (every country has a troika, drawn through lots) **—** Latvia, the Philippines and South Africa. Presenting **India's defence, attorney general made a key promise: that India would r**atify the UN Convention **Against Torture, which it hasn't for 20 years.**

Pepper it with
National human rights commission
FCRA

India promised to "accept" 152 of the 250 recommendations, and "noted" the rest. UN procedure doesn't allow recommendations to be "rejected."Most of the 152 recommendations that India accepted pertained to sustainable development goals related to eliminating poverty, access to safe drinking water, sanitation and improving protection for women and children.

How are the recommendations compiled?

The process starts about a year before the review, when diplomats of the country in question in Geneva and at headquarters begin consultations on the human rights issues expected to be raised. Previous reviews, NGO reports, media debates, and reports of various UN committees are fodder for countries to ask questions of other countries. Simultaneously, discussions are begun in the five regional groups, created along geopolitical lines.

Since any country can make a recommendation about another country, these are sent to the troika nations, who are the rapporteurs for the country in question, about 3-4 months before the review. The troika collates the questions in consultation with the human rights desk officer of the country in question.

What was so important about India promising to ratify the UN Convention Against Torture?

India signed the treaty 20 years ago, but never ratified it. In 2010, the Bill was sent to a Parliamentary Committee whose recommendations were never accepted, and the Bill lapsed in 2014. At Geneva, 30 countries, including Germany, Australia, Japan, Israel and Russia, called on India to ratify the convention. **India argued that "the concept of torture is** completely alien to our culture and it has no place **in the governance of the nation", but promised to** ratify the Convention. India had made a similar promise in 2012, when it faced the second UPR cycle.

Way forward

Main recommendations made to India

- ✓ Countries including Switzerland and Pakistan asked for the abolition of the Armed Forces Special Powers Act (AFSPA).
- ✓ Several countries like Germany and the United States said the use of the Foreign Contribution (Regulation) Act to harass and intimidate NGOs should end.
- ✓ 10 countries raised concerns over restrictions to freedom of assembly and association.
- ✓ 15 countries said they were concerned about growing violence, including mob violence.
- ✓ Ten countries asked India to criminalise marital rape, and 30 said they were concerned about growing violence against women.

The recommendations are not binding, but they carry the moral imprimatur of the international community behind them. India is proud of its free press and independent judiciary, and of being **the world's largest democracy. Severe human rights violations do not go with these attributes.** The next UPR is in 2022.

World Maritime Day

The world maritime day was celebrated this year with the theme "Connecting Ships, Ports and People."

The aim of the 2017 theme is to build on the World Maritime Day theme for 2016, "Shipping: indispensable to the world", by focusing on helping IMO Member States to develop and implement maritime strategies to invest in a joined-up, interagency approach that addresses the whole range of issues, including the facilitation of maritime transport, and increasing efficiency, navigational safety, protection of the marine environment, and maritime security.

In this way, IMO will be contributing to achieving the United Nations' Sustainable Development Goals (SDGs) which are a broad response to the challenges facing the world today – increasing world population; climate change; threats to the environment; unsustainable exploitation of natural resources; threats to food security; societal threats posed by organized criminals and violent extremists; and instability leading to mixed migration.

The United Nations (UN), via the International Maritime Organization (IMO), created World Maritime Day to celebrate the international maritime **industry's contribution towards the world's economy, especially** in sh**ipping. The event's date** varies by year and country but it is always on the last week of September.

About IMO

- ✓ As a specialized agency of the United Nations, IMO is the global standard-setting authority for the safety, security and environmental performance of international shipping.
- ✓ Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.
- ✓ IMO measures cover all aspects of international shipping – including ship design, construction, equipment, manning, operation and disposal – to

Pepper it with National Maritime Day

ensure that this vital sector for remains safe, environmentally sound, energy efficient and secure.

World's biggest X-ray laser

A sleek, subterranean X-ray laser was unveiled in Germany, by far the most powerful in the world. The European X-Ray Free Electron Laser, or XFEL, is lodged in a series of tunnels up to 38 metres underground near the city of Hamburg.

European XFEL will reveal — and capture in images — secrets at the sub-atomic level, promising breakthroughs in medicine, biology, energy, information technology and chemistry. It will map the molecular architecture of viruses and cells; render three-dimensional nano-scale snapshots; and film chemical reactions as they unfold.

Objective

Earth scientists should be able to duplicate and study processes occurring deep inside planets, including our own. The laser is the biggest, and the most powerful, source of X-rays ever made.

> Pepper it with
> Thirty meter telescope
> CERN

Facts

1. **Its centerpiece is the world's longest** — 1.7 kilometres — superconducting linear accelerator, designed to provide the energy needed to generate X-ray flashes a billion times brighter than the best conventional radiation sources.
2. **That's 27,000 X**-ray flashes per second, compared to the 120/sec produced by a laser of the same type at the U.S. National Accelerator Laboratory in Stanford, California, and 60/sec generated by another in Japan.
3. For X-ray lasers, brilliance is measured in the number of photons — sub-atomic light particles with no electric charge that move at the speed of light — generated at a certain radiation wavelength, from high-energy gamma- and X-rays, to low-energy infrared and radio waves.

Nano scale use

The 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.

Scientists working in the field of medicine are eager to train these flashes on the tiniest building blocks of living tissue, whether of humans or pathogens. The ultra-short duration of XFEL pulses will create film-like sequences that can record these changes.

CERT-**In issues alert on 'LockyRansomware'**

The Indian Computer Emergency Response Team (CERT-In) recently 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.

About LockyRansomware

1. LockyRansomware is learnt to be demanding ransom of half bitcoin, which at present rate is equivalent to over Rs 1.5 lakh. The alert, issued on Cyber Swachhta Kendra, said it has been reported that a new wave of spam mails is circulating with common subject lines to spread variants of LockyRansomware.
2. **The messages contain common subjects like 'please print', 'documents', 'photo', 'Images', 'scans' and 'pictures'. However, the subject texts may change in targeted spear phishing campaigns," the alert, which described severity of the ransomware as "high", according to CERT-In.**

> Pepper it with
> Wannacry and
> Petyaransomware

3. To target users, spam e-mails showing links to fake websites is being used to spread Locky variants.
4. Users are advised to exercise caution while opening e-mails and organisations are advised to deploy anti-spam solutions and update spam block lists.

IMPACT

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

CERT-In is operational since January 2004. The constituency of CERT-In is the Indian Cyber Community. CERT-In is the national nodal agency for responding to computer security incidents as and when they occur.

In the recent Information Technology Amendment Act 2008, CERT-In has been designated to serve as the national agency to perform the following functions in the area of cyber security:

- Collection, analysis and dissemination of information on cyber incidents.
- Forecast and alerts of cyber security incidents
- Emergency measures for handling cyber security incidents
- Coordination of cyber incident response activities.
- Issue guidelines, advisories, vulnerability notes and whitepapers relating to information security practices, procedures, prevention, response and reporting of cyber incidents.
- Such other functions relating to cyber security as may be prescribed.

India's first hyperloop to connect twin Amaravati and Vijayawada

Fancy travelling from Vijayawada to Amaravati in five minutes flat is all set to become a reality, with US-based Hyperloop Transportation Technologies Inc (HTT) gearing up to roll out India's first hyperloop project connecting Vijayawada and Andhra Pradesh's capital Amaravati.

Hyperloop, which uses a low pressure tube to transport people at speeds as high as 1,200 km per hour, will cut down the nearly one-hour travel time for the Vijayawada-Amaravati ride to just 5-6 minutes. While by road, the Vijayawada-Amaravati distance is around 20 km, the HTT plans to build a 16-km long tube for the project.

The project, to be taken up on a public private partnership (PPP) mode, will cost between $200-250 million (Rs. 1,300-1,600 crore) and create over 2,500 jobs.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I						■					
II											
III								■				
IV											
M											

Pepper it with
Bullet Trains
Magnetic Leviation
Technology

Andhra Pradesh Economic Development Board (APEDB) along with the AP government will assist HTT with all regulatory requirements and develop and implement the hyperloop project in Amaravati.

Significance

AP being India's seventh largest with a population of over 50 million people, connecting the two emerging development regions of Vijayawada and Amaravati with ultra-highspeed transportation would establish the state as a leader in technological innovation and sustainable development.

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.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III								■				
IV											
M											

✓ 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. For example, if one solar cell gets hit by a micrometeorite, only that cell will fail.

✓ 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 ultrathin solar cells as well as a little bit of propellant. The company plans to launch the craft frequently, with many Branes deployed at the same time, helping to reduce costs.

Pepper it with
Japan's space junk
mission Galileo mission

Page 43

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

✓ 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.

Space Debris

More than 500,000 pieces of debris, or "space junk," are tracked as they orbit the Earth. They all travel at speeds up to 17,500 mph, fast enough for a relatively small piece of orbital debris to damage a satellite or a spacecraft.

Space debris encompasses both natural (meteoroid) and artificial (man-made) particles. Meteoroids are in orbit about the sun, while most artificial debris is in orbit about the Earth. Hence, the latter is more commonly referred to as orbital debris.

Orbital debris is any man-made object in orbit about the Earth which no longer serves a useful function. Such debris includes nonfunctional spacecraft, abandoned launch vehicle stages, mission-related debris and fragmentation debris.

Cassini spacecraft makes death plunge into Saturn

After 20 years in space, NASA's famed Cassini spacecraft made its final death plunge into Saturn, ending a storied mission that scientists say taught us nearly everything we know about Saturn today and transformed the way we think about life elsewhere in the solar system.

| GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III								■				
IV											
M											

Cassini, an international project that cost $3.9 billion and included scientists **from 27 nations, disintegrated as it dove into Saturn's atmosphere at a speed** of 1,20,700kmph. The signal from the spacecraft is gone. The spacecraft ran out of rocket fuel after a journey of some 7.9 billion km.

Its well-**planned demise was a way to prevent any damage to Saturn's** ocean-bearing moons Titan and Enceladus.

Pepper it with
Lucy and psyche
DART mission

About Cassini spacecraft

- Cassini-Huygens is one of the most ambitious missions ever launched into space. Loaded with an array of powerful instruments and cameras, the spacecraft is capable of taking accurate measurements and detailed images in a variety of atmospheric conditions and light spectra.

- The spacecraft was launched with two elements: the Cassini orbiter and the Huygens probe. Cassini-Huygens reached Saturn and its moons in July 2004, beaming home valuable data that has transformed our understanding of the Saturnian system. Huygens entered the murky atmosphere of Titan, Saturn's biggest moon, and descended via parachute onto its surface - the most distant spacecraft landing to date.

Cassini's Grand Finale BY THE NUMBERS

- Cassini, named after the French-Italian astronomer Giovanni Domenico Cassini, who discovered in the 17th century that Saturn had several moons and a gap between its rings.

- **Cassini's discovery of ocean worlds at Titan and** Enceladus changed everything, shaking views to the core about surprising places to search for potential life beyond Earth.

- Cassini launched from Cape Canaveral, Florida in 1997, then spent seven years in transit followed by 13 years orbiting Saturn.

- In that time, it discovered six more moons around Saturn, three-dimensional structures **towering above Saturn's rings,** and a giant storm that raged across the planet for nearly a year.
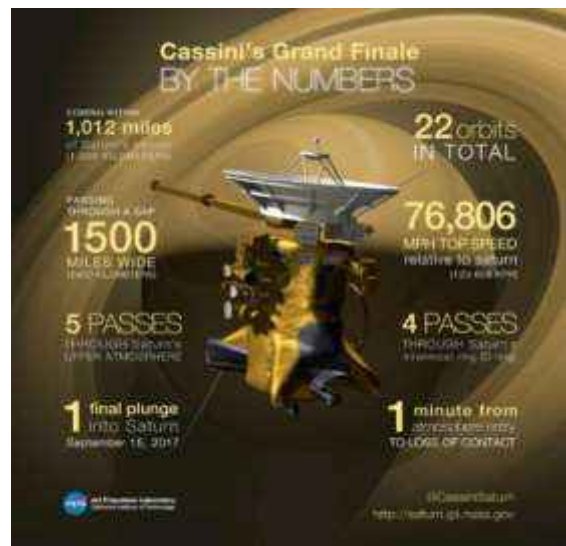
Bullet Train

India's first bullet train project between Ahmedabad and Mumbai was formally launched by Indian Prime Minister, and his Japanese counterpart. The high-speed rail network is likely to be fully operational, and serviceable to the public by August 15, 2022, commemorating 75 years since India gained independence.

A 21-km-long tunnel will be built between Boisar and BKC in Mumbai, of which 7km will be under water. Initial estimates peg the land needed for the project at 825 hectares. About 92% of the route will be elevated, 6% will go through tunnels, and only 2% would be on the ground.

The bullet train will run at a maximum speed of 350 kilometres per hour. It is expected to cover the 508km stretch in a little more than two, cutting short the present commuting time of around 8 hours. The project is expected to cost Rs.1.1 lakh crore according to tentative estimates.

Over 80% of the total cost (Rs. 88,000 crore) will be funded by the Japanese, in the form of a 'friendly' loan which will be sanctioned at 0.1% interest over a 50-year-repayment cycle. An additional clause granting a grace period of 15 years has also been included.

Initially, the train will have 10 coaches with a seating capacity of 750 passengers. Later, it is proposed to have 16 coaches with a seating capacity of 1,250 passengers. The train is slated to have two categories of seats - executive and economy.

The government blueprint envisages that by 2050, 1.6 lakh commuters will be travelling by high-speed trains on a daily basis. Moreover, the bullet train service is expected to service 1.5 crore travelers every year.

Significance

There is an expectation that similar to the experience for Japan and China, this project could be one of the catalysts in transforming India.

There are three advantages from the MAHSR project: economic benefits, including infrastructure development and job creation; technological development.

This project could provide an important boost to public investment. The soft funding of the project by the Japanese government is an additional advantage, which brings the two countries together and provides significant economic benefits.

The HSR system is more energy- and fuel-efficient. Studies show that HSR systems are around three times more fuel-efficient than aeroplanes and five times more fuel-efficient than cars. Given the traffic density in this corridor, this project could lead to a significant reduction in India's carbon footprint.

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.

> **MAGLEV**
> Maglev (derived from magnetic levitation) is a public transport technology that uses magnetic levitation to move vehicles without making contact with the ground or an electrical pickup. Maglev competes with high speed rail and airlines
> This floating magnet design creates a smooth trip. Even though the train can travel up to 375 miles per hour, a rider experiences less turbulence because the only source of friction is air.
> **Maglev trains are "driven" by the powered** guideway. Any two trains traveling the same route cannot catch up and crash into one another because th**ey're all being po**wered to move at the same speed.
> With Maglev, there is no driver. The vehicles have to move where the network sends them.

> *Pepper it with Shinkansen trains*

Page 45

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Scientists map lunar water

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 was build 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 have 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.

Findings

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.**

Solar wind impact

1. The researchers said that 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 towards the equator. That pattern is consistent with implantation

via solar wind — the constant bombardment of protons from the sun.
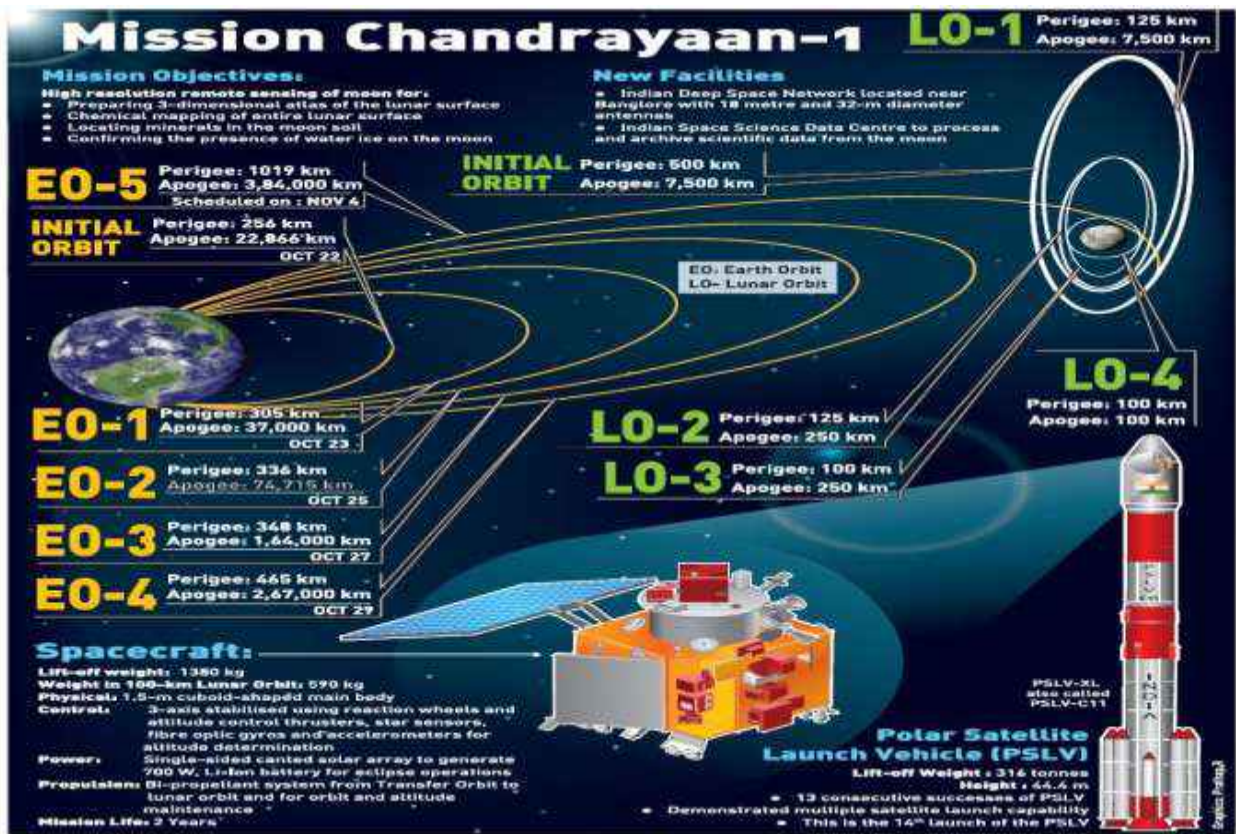
2. Although the bulk of the water mapped in this study could be attributed to solar wind, there were exceptions. For example, the researchers found higher-than-average concentrations of water in lunar volcanic deposits near the **moon's equator, where background water in the soil is scarce.** Rather 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.

> Pepper it with Mars Orbital Misson Chandrayaan 2

3. The study also found that 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

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 46

to nearly bone dry around lunar noon. The fluctuation can be as much as 200 parts per million.

About Chandrayaan I / PSLV-C11

Government of India approved ISRO's proposal for the first Indian Moon Mission, called Chandrayaan-1 in 2003.

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-dimensionalatlas (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 & Thorium with high spatial resolution.

The mission goal of harnessing the science payloads, lunar craft and the launch vehicle with suitable ground support systems including Deep Space Network (DSN) station were realised, which were helpful for future explorations like the Mars Orbiter Mission. Mission goals like spacecraft integration and testing, launching and achieving lunar polar orbit of about 100 km, in-orbit operation of experiments, communication/telecom and, telemetry data reception, quick look data and archival for scientific utilisation by scientists were also met.

Pt. DeenDayal Upadhayay Vigyan Gram Sankul Pariyojana

The Ministry of Science & Technology, Earth Sciences and Environment, **Forest & Climate Change launched "Pt**. Deen Dayal Upadhayay 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. The project has been inspired by teachings and ideals of Pt. Deen Dayal Upadhayay whose birth centenary is being celebrated this year.

- DST 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).

> Pepper it with ICAR, Inspire Programme

- 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.
- Four clusters at Gaindikhata, Bazeera, Bhigun (in Garhwal) and Kausani (in Kumaon) have been selected for the intervention.
- Sustainable employment and livelihood options within the clusters such as eco-tourism, naturopathy and yoga, are also planned to be promoted.

Significance

Many target people would benefit directly or indirectly through this project which are located at different altitudes (up to 3000 meters). As the living conditions and resources available at different altitude is relatively different, 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.

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, BadiElaichi 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.

These clusters would act as model production cum training and demonstration centres. Various scientific institutions would participate collectively in this endeavour to accomplish the dream of PanditDeenDayal **Upadhyay towards 'Swavlamban'.**

Fourth gravitational wave detected

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.

VIRGO DETECTOR

- Virgo detector is located at the European Gravitational Observatory (EGO) in Cascina, near Pisa, Italy. The Virgo detector is an underground L-shaped instrument that tracks gravitational waves using the physics of laser light and space.

Pepper it with LIGO, CERN

- 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.
- Previously, gravitational waves have been found using two U.S.-based detectors, which are the most sophisticated in the world — known as the Laser Interferometer Gravitational-Wave Observatory (LIGO) detectors in Livingston, Louisiana, and Hanford, Washington.

About Gravitational Waves

Gravitational waves are 'ripples' in the fabric of space-time caused by some of the most violent and energetic processes in the Universe. Albert Einstein predicted the existence of gravitational waves in 1916 in his general theory of relativity. Einstein's mathematics showed that massive accelerating objects (such as neutron stars or black holes orbiting each other) would disrupt space-time in such a way that 'waves' of distorted space would radiate from the source (like the movement of waves away from a stone thrown into a pond). Furthermore, these ripples would travel at the speed of light through the Universe, carrying with them information about their cataclysmic origins, as well as invaluable clues to the nature of gravity itself.

The strongest gravitational waves are produced by catastrophic events such as colliding black holes, the collapse of stellar cores (supernovae), coalescing neutron stars or white dwarf stars, the slightly wobbly rotation of neutron stars that are not perfect spheres, and the remnants of gravitational radiation created by the birth of the Universe itself.

Low-cost test to pinpoint Zika virus

A new test that resembles a pregnancy indicator strip can help detect Zika and dengue viruses in blood, according to a study which used serum samples from several countries including India.

The test developed by researchers, including those from the Massachusetts Institute of Technology (MIT) in the U.S., can accurately differentiate between the two mosquito-borne viruses.

About ZIKA Virus

Pepper it with EBOLA

Zika virus is a mosquito-borne flavivirus that was first identified in Uganda in 1947 in monkeys through a network that monitored yellow fever. It was later identified in humans in 1952 in Uganda and the United Republic of Tanzania. Outbreaks of Zika virus disease have been recorded in Africa, the Americas, Asia and the Pacific. The first large outbreak of disease caused by Zika infection was reported from the Island of Yap (Federated States of Micronesia) in 2007. In July 2015 Brazil reported an association between Zika virus infection and Guillain-Barré syndrome. In October 2015 Brazil reported an association between Zika virus infection and microcephaly.

The symptoms are similar to other arbovirus infections such as dengue, and include fever, skin rashes, conjunctivitis, muscle and joint pain, malaise, and headache. These symptoms are usually mild and last for 2-7 days.

Zika virus is primarily transmitted to people through the bite of an infected mosquito from the Aedes genus, mainly Aedesaegypti in tropical regions. Aedes mosquitoes usually bite during the day, peaking during early morning and late afternoon/evening. This is the same mosquito that transmits dengue, chikungunya and yellow fever. Sexual transmission of Zika virus is also possible. Other modes of transmission such as blood transfusion are being investigated.

ISRO launch fails

ISRO declared the IRNSS-1H launch a failure after a heat shield failed to separate, preventing the satellite from being deployed in space by PSLV-C39, the launch vehicle. The performance of PSLV-C39 went to plan up to the point when the satellite had to be inserted in orbit.

The heat shield is a protective cover provided around the satellite to help it withstand the adverse temperatures felt when a rocket is launched into space.

Separation of the heat shield occurs mid-flight when the rocket leaves **Earth's atmosphere.**

IRNSS-1H was the eighth in a series of IRNSS (Indian Regional Navigation Satellite Systems) satellites launched by ISRO since July 2013. This was to create a constellation to provide satellite-based navigation services over the Indian subcontinent on the lines of the global positioning system (GPS) created by the United States.

Pepper it with IRNSS GSLV and PSLV

The Indian navigation satellite constellation, called NavIC, essentially comprises seven satellites. IRNSS-1H was intended to replace IRNSS-1A, which developed problems last year. IRNSS-1H would have **augmented "the** existing seven satellites of NavIC **constellation".** It was supposed to sit in a sub-

Geosynchronous Transfer Orbit (sub-GTO).

ISRO stated last January that three Rubidium Atomic Frequency Standard (RAFS) clocks on IRNSS-1A, the first satellite launched in 2013, had developed problems, rendering the satellite ineffective for navigation services. Atomic clocks are a key component in a navigation system. The ISRO satellites are equipped with three clocks each — one clock being the primary timekeeper and two acting as backup. On IRNSS-1A, all three clocks had failed. Accurate **timekeeping lies at the heart of navigation systems since the determination of a person's position** on earth is subject to the accurate calculation of delays in signal transmission from the satellite to earth.

Way forward

The failure of the mission is particularly disheartening as the IRNSS-1H satellite was jointly assembled and tested by ISRO and a Bengaluru-based private company, the first time a single private company, rather than a consortium, was involved in building a satellite. The satellite was in no way to blame for the failure of the mission. The space organisation has thrown open its doors to private companies to build as many as 18 spacecraft a year beginning mid or end-2018.

As only six of the seven satellites are operational, there are gaps in the navigation data sent by the IRNSS. With the failure of this mission, India will have to wait for some more time before the next mission to send a replacement for the IRNSS-1A satellite is ready.

Tigers to make a comeback in Buxa reserve

Tigers will roar again at Buxa Tiger Reserve in West Bengal. Located in Alipurduar district, the reserve, parts of which border Bhutan, has been identified for the tiger augmentation programme by the National Tiger Conservation Authority (NTCA).

Concern

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.

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.

> Pepper it with
> Project Tiger
> Functions of NTCA

> NTCA
> The National Tiger Conservation Authority is a statutory body under the Ministry of Environment, Forests and Climate Change constituted under enabling provisions of the Wildlife (Protection) Act, 1972, as amended in 2006, for strengthening tiger conservation, as per powers and functions assigned to it under the said Act.

Challenges

- 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.
- In an attempt to mitigate the human versus animal conflict, the Forest Department has started awareness programmes in the villages before introducing the tigers.
- Besides the population pressure, another major challenge at Buxa is the broad gauge rail line passing through the reserve, connecting Siliguri and Alipurduar.

About Buxa tiger reserve

Along with the plant diversity, the Buxa Tiger Reserve harbours a wide range of animal diversity. It will be worth noting that there are 20 species of mammals which are endangered and are included in Schedule I of Wildlife protection Act (1972), 7 no. of birds, 10 no. of reptiles, are also included within the endangered lists.

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. The Buxa reserve is also home to smaller cats such as leopards.

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

One of the biodiversity-rich uninhabited islands part of Lakshadweep has vanished due to coastal erosion and another four such territories in the sea are shrinking fast, claims a new study.

Parali I island, part of Bangaram atoll, which was 0.032 km in 1968 has been eroded to an extent of 100%, resulting in its inundation.

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.

On an overall assessment of the changes in the aerial extent of islands using RS/GIS, it has been noticed that all the five islets of Bangaram atoll had undergone coastal erosion.

> Pepper it with
> Remote sensing
> Geographic Information System (GIS)

Significance

- The results are indicative of the urgent measures to be implemented on each islet of the atoll to check further erosion.
- It is also recommended to check the feasibility of a bio protection strategy using mangroves, in addition to the conventional physical protection measures.
- 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.

Mouse deer reintroduced into Amrabad forest

In a novel and unique initiative the Telangana Forest Department re-**introduced the 'mouse deer' into the forests of Nallamalla in Amrabad** Tiger Reserve **into a specially made 'reintroduction' enclosure of over 2.14** hectares in the Mannunur range.

The Amrabad Tiger Reserve was chosen because these animals were earlier wandering in this area. The reintroduction enclosure is completely protected by providing solar fence, with a solar powered borewell for providing water, CCTV cameras etc.

Once they are found to have adapted to the wild vegetation, they will be released 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.

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.

The Nehru Zoological Park (T.S), in association with LaCONES and the Central Zoo Authority, Delhi, had undertaken conservation breeding programme of mouse deer in the Nehru Zoological Park in 2010 and, after six years, the population of mouse deer has increased to 172.
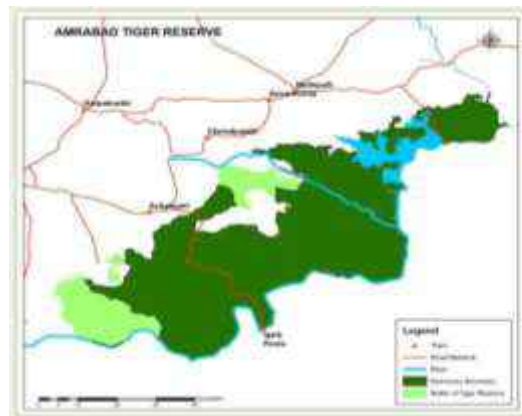
District	Mahaboobnagar and Nalgoda
Area	Core area - 2166.37 Sq. Kms., Buffer area - 445.02 Sq. Kms.
Notified on	Wildlife Sanctuary - 27-06-1978, Tiger Reserve in 1983
Temperature	Max: 46°C, Min: 8°C
Rainfall	Average Rainfall: 900-1000mm
Forest Type	Southern dry mixed deciduous forest, southern tropical moist deciduous forest types intermingled with scrub, bamboo and grass
Tribes	Most Primitive tribes, Chenchu and the Lambadas - the pastoral nomads live here
Indicator species	Tiger

Pepper it with
Kasu Brahmananda Reddy National Park
Mahaveer Harina Vanasthali National Park
Mrugavani National Park

Conference on "Sustainable Landscapes & Forest Ecosystems: Theory to Practice"

"**Innovation is the need of the hou**r. Innovation co-efficient now is more important than any other co-**efficient."**

Inaugurating a two-day conference on **"Sustainable landscapes and forest** ecosystems: Theory to Practice" environment minister emphasized on the need to create an enabling environment through small steps such as planting more trees.

✓ The conference urged people to come with out-of-the-box ideas and solutions on increasing the forest cover much beyond the stipulated

Pepper it with
USAID
REDD and REDD+

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 51

33 per cent & also urged scientists to come out with innovative solution for the problem of weed formation.

✓ The objectives of the conference were to explore issues and opportunities for ecosystem approach to land management in India; discussing how the approaches and tools developed under the Forest-PLUS programme can be used to improve forest management in India and to document and disseminate that learning with a wider group.

✓ Under Nationally Determined Contribution the government has promised to increase **the country's forest cover from 24% to 33%** of the geographical area and creating an additional carbon sink of 2.5 to 3 billion tons of CO2 equivalent in forests. The target is proposed to be achieved through a number of planned afforestation drives and initiative

> 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.

Wood is Good

"Wood is Good" campaign was launched at New Delhi on this occasion. Wood is a climate-friendly material, as it is a renewable resource, having zero carbon footprint.

Wood for Good is the timber industry's campaign to promote use of wood instead of plastic and steel. Wood is nature's most versatile building material and modern engineering methods expand possibilities for its application beyond traditional uses. The objective is to make wood a first choice material for specifiers and designers by demonstrating what you can do with wood.

Long-**endangered snow leopard upgraded to 'vulnerable' status**

The elusive snow leopard long considered an "endangered" species has been upgraded to "vulnerable" by the International Union for Conservation of Nature.

Snow leopards had been listed as endangered since 1972. The reclassification announced by the International Union for Conservation of Nature, or IUCN, followed a three-year assessment that determined there are not fewer than 2,500 mature snow leopards in the wild, and that their numbers are not in steep decline -

the two criteria for being **considered "endangered."**

> Pepper it with Namdapha flying squirrel Kashmir Stag (Hangul)

Using improved methods for **assessing the cats' population, experts estimated about 4,000** live in the wild, though there could be as many as 10,000. Scientists have managed to survey only a small fraction of the **animal's high**-mountain range, an area covering some 1.8 million square kilometers crossing into 12 countries in Asia. The increase is due to some positive developments like increase in the number of protected areas, as well as stepped-up efforts by local communities to protect the animals from poachers.

The cat that chuffs

- For its relatively small size, the snow leopard has an extraordinarily long tail—sometimes measuring a metre. It is flexible and helps the animal keep its balance while leaping through treacherous and rocky terrain.

- While asleep, the animal wraps its tail—which contains a large amount of fat and is covered with thick fur—around itself to keep warm.

- The physiology of its throat oddly does not allow the big cat to roar, unlike say a tiger or lion. But it can 'chuff'. Chuffing, a sort of snort, is a non-aggressive vocalisation generally used when two cats meet. Captive snow leopards are also known to chuff at their human keepers. The animal can purr, mew, hiss and wail too.

Challenge ahead

The new classification does not mean they are safe.

The animals still face serious challenges including poaching **and loss of prey in their high Himalayan habitat. "The species still faces 'a high risk of extinction in the wild' and is likely still** declining just not at the rate previously thought.

About Snow Leopard

- This high altitude cat is rarely sighted and because it is so elusive, accurate population numbers are hard to come by, although estimates range from 450 to 500 individuals for India.
- The Government of India has identified the snow leopard as a flagship species for the high altitude Himalayas. They are found at elevations of 3,000-5,000 meters or higher in the Himalayas.
- It has developed a centrally-supported programme called Project Snow Leopard for the conservation of the species and its habitats.
- Snow leopards live in the mountainous regions of central and southern Asia. In India, their geographical range encompasses a large part of the western Himalayas including the states of Jammu and Kashmir, Himachal Pradesh, Uttarakhand and Sikkim and Arunachal Pradesh in the eastern Himalayas.
- Snow leopards prefer steep, rugged terrains with rocky outcrops and ravines. This type of habitat provides good cover and clear view to help them sneak up on their prey.

30th anniversary of the Montreal Protocol and 23rd World Ozone Day

30th anniversary of the Montreal Protocol and 23rd World Ozone Day was celebrated with the theme - "Caring for all life under the Sun."

Special mention was made to the pan-India awareness campaign launched by the Environment Ministry during the celebrations. This campaign was among the most widespread engagements of the Ministry for awareness generation, carried out with the active partnership of States through schools and academic/research institutions spread across the country.

GS CONNECT											
GS	1	2	3	4	5	6	7	8	9	10	11
I											
II											
III									■	■		
IV											
M											

Pepper it with Vienna Convention on ODS, Kigali Agreement

India's HCFC Phase out Management Plan (HPMP)

India has launched the second phase of HCFC Phase out Management Plan.

The HPMP II provides for promotion of energy efficiency, development building codes integrating HCFC phase out issues, cold chain development with non-HCFC alternatives and development of standards for new non-ODS (Ozone depleting substances) and low GWP (Global warming potential) alternatives, while transitioning away from HCFCs. It is expected that there would be a net direct CO_2-equivalent emission reductions of about 8.5 million metric tonne annually from 2023. It also specifically focusses on the MSME sector in foam manufacturing. Adequate attention has also been given to synergize the Refrigeration and Servicing (RAC) sector trainings under HPMP II, with the Skill India Mission, in order to multiply the impact of skilling and training.

Under the Montreal Protocol, the accelerated phase out of Hydrochlorofluorcarbons (HCFCs) is underway with a phase out of HCFCs by 2030. Above mentioned sectors are cross-cutting and are directly related to sectors such as urban development, agriculture through cold chain sector, and industrial development. India is undertaking phase-out of HCFCs through the implementation of HCFC Phase-out Management Plan (HPMP). The HPMP Stage-I has been already implemented in the country and has successfully met all the ODS phase-out targets, including those of HPMP Stage-I.

MONTREAL PROTOCOL: A BRIEF BACKGROUND

The year 2017 marks the 30th Anniversary of the Montreal Protocol on Substances that Deplete the Ozone Layer. 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. The Montreal Protocol is the only environmental treaty which enjoys universal ratification of 197 UN member countries.

During the Kigali negotiations, India piloted the concept of two base lines and a differentiated phased down time schedule to factor in the needs of developing countries. This was the first time in the Montreal Protocol that the concept of two baseline has been adopted both for **developed and developing countries. On India's initiative, energy efficiency was included for the** first time in the Montreal Protocol as an agreed finance solution while phasing down HFCs.

Page 53

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

India is among the few countries globally and a pioneer, in some cases, in the use of non-ODS low Global Warming Potential (GWP) technologies.

Sardar Sarovar Dam inaugurated

Prime Minister inaugurated Sardar Sarovar Dam on the Narmada river recently. It is one of the largest dams in the world. Having a length of 1.2 kms and a depth of 163 metres, the dam is expected to be shared among the three states of Madhya Pradesh, Maharashtra and Gujarat. The dam is supposed to be a booster to the dream of making poor farmers wealthy by 2022.

History

- After carrying out a study on the usage of the Narmada river water that flowed through the states of Madhya Pradesh and Gujarat and into the Arabian Sea, a project report was prepared for the dam led to much dispute over the means of distributing the Narmada water among the three states- Gujarat, Maharashtra and Madhya Pradesh.

> Pepper it with Narmada Bachao Aandolan, Tehri dam

- As the negotiations bore no fruit, a Narmada Water Dispute Tribunal (NWDT) was created in 1969 to decide the fate of the project. The NWDT gave its verdict in 1979. The Planning Commission finally approved the project in 1988.
- It soon caught the attention of social activists who found that the dam did not meet the required environmental and social conditions as meted out by the Ministry of Environment and Forests.
- After several years of much deliberation, however, the Supreme Court allowed the construction of the dam to proceed, provided it met with certain conditions. The foremost condition placed by the Court was that all those displaced by the increase in height of 5 metres be satisfactorily rehabilitated and that the process be repeated for every five metres increase in height.
- The Sardar Sarovar project has been realised despite funding constraints—the World Bank infamously pulled out of the project in 1996 citing environmental concerns—is definitely reason for cheer.
- Currently the height of the dam has been raised to 138.68 metres with a usable storage of 4.73 million acre feet of water.

Benefits

This dam is a valuable addition to **India's** infrastructure. The project will help irrigate over 18 lakh hectares of land (covering 3,112 villages) in Gujarat, 2.46 lakh ha in the desert districts of Barmer and Jallore in Rajasthan and 37,500 ha in tribal districts in Maharashtra. Given nearly three-quarters of the command area in Gujarat and the entire command

A struggle that stretched for decades

The Narmada dam or the Sardar Sarovar project has been mired in disputes. A brief timeline.

1946: Plan for harnessing Narmada for irrigation, power initiated
1961: Foundation stone laid by Pandit Jawaharlal Nehru
1964: Expert panel formed to resolve dispute about water sharing between Gujarat and Madhya Pradesh
1979: MP refuses to agree with water sharing pact. Narmada Water Dispute Tribunal gives final award
1980s: Protests against the project gained speed
1991: World Bank commissions team to look into the matter
1994: NBA petitioned SC for an independent body to examine the project
1999: SC gives nod to increase dam's height to be raised to 289 ft
October 2000: SC gives nod to increase height to 300 ft
2000: SC dismisses NBAs petition, clears construction of the project
2002: Narmada Authority approves increasing dam's height to 312 ft
March 2004: Authority allows height to be increased to 360 ft
2013: Heavy rains raise reservoir level displaces 7,000 villagers upstream

Dam stats

3,969 ft long | 29 million people provided drinking water by the project

535 ft high | 75,000 km canal length within Gujarat

area in Rajasthan is drought-prone, the project goes a long way in ensuring water security in these reaches.

It is also expected to deliver 0.86 million acre feet of drinking water to 131 urban centres and 9,633 villages in Gujarat. For many villages in the Saurashtra and Kachchh region around the

sea which would mean a welcome relief from the high salinity and fluoride content in ground water.

Two hydro-power units that are part of the the Sardar Sarovar project will generate 1200 MW and 250 MW, to be shared between Madhya Pradesh (57%), Maharashtra (27%) and Gujarat (16%).

Problems with Sardar Sarovar Dam

1. One of the reasons why **it didn't get complete for 54 years is the fact that rehabilitation and** resettlement is yet to get a neat resolution. There have been claims of sub-par resettlement sites being offered, where there is no water and power connection.
2. The bigger problem is that much work still needs to be done on the canal network for the Sardar Sarovar project to be truly complete. Of the 71,748 km of the planned canal system, just 49,313 km will have been completed by 2017-18, though the bulk of the lag is concentrated in the sub-minor canal network. Consequently, a third of the irrigation potential will remain unrealised. With nearly a third of the canal system still to come up, the project risks losing a great volume of monsoonal rainfall to run-off. The excess water that could have been diverted through the unbuilt canals thus becomes a notional loss.
3. The government will also have to deal with growth of salinity in the surrounding shore areas as fresh water from river will not enter sea. So estuaries will be affected and livelihood of people connected to the estuaries.
4. We have moved away from the era of big dams. Gujarat is only state with positive recharge of water table. This is due to small check dams which strengthens the aquifers and recharge them. Also small and low cost solution are good for countries like India.

New species of snake from the northern Western Ghats

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

The three-foot-long 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.

About Western Ghat

- Western Ghats is named one of the Hottest Biodiversity Hotspots. It is a mountain range that runs through the states of Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu.

> Pepper it with
> Gadgill Committee
> Kasturirangan Panel

- Running parallel to the western coast and along the western edge of the Deccan Plateau, the hills cover over 1,60,000 square km. It is a UNESCO World Heritage Site.
- The Western Ghats block southwest monsoon winds from reaching the Deccan Plateau and are consequently an area of high rainfall, particularly on their western side. Anamudi, the highest peak here, is located in Kerala. Outside of the Himalayas, the mountain at an elevation of 2,695 is also the highest peak in India.
- The major river systems originating in the Western Ghats include Godavari, Kaveri, Krishna, Thamiraparani and Tungabhadra. They are lost faster than other species. The area covers five percent of India's land.

Animal monitoring goes real time in PTR

Monitoring of wild animals and forest terrains is unfolding real time in the Periyar Tiger Reserve (PTR).

A cost-**effective** 'video surveillance-cum-communication enhancer intranet network,' **which can monitor animal movements and forest areas real time,** has been installed in the reserve. Microwave antennas and towers are used to set up the network. A night vision camera unit and a tower has been installed at Poovarashu,

a marshy field which is 13 km into the Periyar forest and frequented by wild animals. The cost of the system worked out to ₹ 4.5 lakh, which is inexpensive when compared to other systems available.

> Pepper it with
> Silent Valley
> National park
> Shola Ecosystem

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 55

Significance

- The system can be used for anti-poaching operations, behaviour studies of animals in their natural habitats and videoconferencing with the field staff out in the forest. If all the anti-poaching camp sheds established in the interior forests are linked to the network, surveillance could be made effective.
- It could also be used to directly transmit the camera trap images from the field to the office. Radio-collared animals could also be tracked using the system.

Periyar Tiger Reserve

- Periyar Tiger Reserve was awarded the U.N.-India Biodiversity Governance award instituted by the GoI and UN Development Programme for best managed Protected Area in the country.
- The award was announced during the Conference of Parties to the Convention on Biological Diversity at Hyderabad in 2012.
- It is a repository of rare, endemic and endangered flora and fauna and forms the major watershed of two important rivers of Kerala, the Periyar and Pamba.

Workshop on implementation of Emergency Action Plan for Dams

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 organised by Tamil Nadu Water Resources Department in collaboration with Central Water Commission was was held recently at Krishnagiri dam site in Tamil Nadu.

India ranks third globally with 5254 large dams in operation and 447 large dams under construction. About 4% of these large dams are over 100 years old and about 17% 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. 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.

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.

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.

About quantum computers

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.

Experts from across the country are expected to gather in sept at Allahabad for a workshop to **develop such a computer. Internationally, Canada's** D-Wave Systems, is a pioneer in developing quantum computers and has sold machines to Lockheed Martin and Google.

Experts, however, say that 'true quantum computers' are still years away, and existing systems use principles of quantum computing to solve very limited problems.

Page 56

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

India to train Afghan Police

India and Afghanistan exchanged a MoU, which will see Afghan police forces trained in India for the first time. The agreement followed a meeting between Afghanistan Chief Executive Dr. Abdullah Abdullah and Prime Minister Narendra Modi.

The MoU reiterated India's commitment to extend full support to Afghanistan's efforts for building a peaceful, united, prosperous, inclusive and democratic Afghanistan.

India has earlier ruled out deploying troops in Afghanistan even as it pledged to expand development and medical assistance for the strife-torn nation.

Nationwide programme to test all TB patients

Beginning September, health authorities will commence a nationwide programme to test every tuberculosis (TB) patient for signs of resistance to first-line drugs.

Other than providing a realistic assessment on the scale of resistance to commonly-available tuberculosis drugs, experts said this could also reveal a large number of hidden tuberculosis patients, as well greater numbers of those with multiple infections of TB and HIV (human immunodeficiency virus).

The new policy, called the Universal Drug Sensitivity Test, which was formalised earlier, will be implemented using a molecular diagnostic test called GeneXpert, a US-developed technology tool being used worldwide since 2010. It can detect the TB bacterium as well check for resistance to rifampicin, one of the standard key TB drugs, within 90 minutes. Conventional tests take at least a day or more and require well-trained personnel for similar results.

States that will first see this policy being implemented include Arunachal Pradesh, Bihar, Goa, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, Tripura and Uttarakhand. These, however, are not the States with the highest tuberculosis burden.

An inability to rapidly diagnose multi-drug resistant tuberculosis has long been identified as chinks in the armor **of India's strategy to eliminate tuberculosis.**

Scientists spot 'spiders' on Mars

Scientists have discovered landforms known as 'spiders' on parts of Mars where they were previously thought not to exist.

The 'spiders' are named for their arachnid-like appearance and are a type of land erosion where networks of cracks form on martian soil, completely different to anything on Earth.

Araneiforms — the scientific name for these features — **occur at the planet's** South Pole and form when carbon dioxide turns to ice during the martian winter.

As the seasons change, direct sunlight penetrates the translucent ice, warming the land beneath. The land surface then gets eroded as the gas races out and rips off little bits of dirt, forming spindly branches which resemble spider legs.

August 2017 was second hottest on record: NASA

Last month was the second warmest August in 137 years of modern record-keeping, according to an analysis of global temperatures by scientists at NASA. **The measured value is "consistent with the trend in global average surface** temperatures that has been observed during the past few decades."

Last month was 0.85 degrees Celsius warmer than the mean August temperature from 1951-1980. It was surpassed by August 2016, which was still affected by the 2015-2016 El Nino and was 0.99 degrees Celsius warmer than normal, according to the US space agency.

However, August this year was about 0.2 degrees warmer than the August following the last large El Nino event in 1997-1998.

India's Mars Orbiter Mission completes 3 years in orbit

India's rendezvous with the red planet continues as its celebrated Mars Orbiter Mission (MOM) completes three years in orbit.

As the country's low-cost MOM completes three years in its Martian orbit, the satellite is in good health and continues to work as expected.

India in September, 2014 successfully placed the MOM 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 in November, 2013. It had escaped the earth's gravitational field on December 1, 2013.

The Rs 450-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).

Antra & Chhaya

Why in News

The Ministry of Health and Family Welfare has launched two new contraceptives, **an injectable contraceptive MPA under the 'Antara' programme and a contraceptive pill, 'Chhaya'**, in the public health system to expand the basket of contraceptive choices to meet the emerging needs of couples.

The contraceptives are available for free in Medical Colleges and District Hospitals and have so far been launched in 10 states.

The contraceptives are safe and highly effective, **the 'Antara' injectable being effective for** three

months and the 'Chayya' pill for one week, and will help meet the changing needs of couples and help women plan and space their pregnancies. In addition, Mission Parivar Vikas, a central family planning initiative has also been launched by the Ministry earlier.

> The 10 states are Maharashtra, UP, MP, Rajasthan, Karnataka, Haryana, WB, Odisha, Delhi and Goa.

Mission Parivar Vikas

- It was launched in 146 high focus districts having the highest total fertility rates in the country. These districts are in the seven high focus, high Total Fertility Rates (TFR) states of Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, Jharkhand, Chhattisgarh and Assam, which **constitute 44% of the country's population.**

- 146 districts of seven states account for nearly 28 per cent of the India's population.

> PEPPER IT WITH
> World population day, fertility rate in India, delimitation commission.

- **The main objective of 'Mission Parivas Vikas' will be to** accelerate access to high quality family planning choices based on information, reliable services and supplies within a rights-based framework.

- 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.

- The mission is aimed at bringing the Total Fertility Rate to 2.1 by the year 2025.

Dairy Processing & Infrastructure Development Fund

Why in News

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

- The new fund will be managed by the National Dairy Development Board (NDDB) and the National Dairy Development Cooperation (NCDC) will be used to provide loan for building an efficient milk procurement system and other processing infrastructure.

- This was a budget announcement. It will benefit improving milk cooperatives and also farmers.

- Under the DIDF, loan will be provided at an interest rate of 6.5% per annum with **a repayment period of 10 years with initial two years of moratorium.**

- The state government will be a guarantor of loan repayment. If the end user is not able to contribute its share for the project sanctioned, the state will contribute the same.

- The move would benefit 95 lakh farmers and help create additional milk processing capacity of 124 lakh litres per day and value added products of manufacturing capacity of 59.78 lakh litre per day. It is expected to provide direct and indirect jobs to 2.4 lakh people.

> Out of Rs. 10881 crore of financial outlay for project components of DIDF, Rs. 8004 crore shall be loan from NABARD to NDDB and NCDC. Initially, the loan under the DIDF will be given to 39 profit-making milk unions of 12 states.

- 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.

Domestic Systemically Important Banks (D-SIBS)

Why in News

The Reserve Bank of India has added HDFC Bank —- the second largest private sector lender in India — in the list of D-SIBs. D-SIB means that the bank is too big to fail.

Following the global financial crisis of 2008, it was observed that problems faced by certain large and highly interconnected financial institutions hampered the orderly functioning of the financial system, which in turn, negatively impacted the real economy. It was decided to identify such institutions and prescribe them higher capital requirements. With keeping this in mind, the Reserve Bank had issued the Framework for dealing with Domestic Systemically Important Banks (D-SIBs) in July 2014 which requires the Reserve Bank to disclose the names of banks designated as D-SIBs every year in August starting from August 2015.

> PEPPER IT WITH
> Deposit Insurance and Credit Guarantee Corporation (DICGC)

The D-SIB Framework specifies a two-step process of identification of D-SIBs. In the first step, the sample of banks to be assessed for systemic importance has to be decided. The selection of banks in the sample for computation of Systemic Importance Scores (SISs) is based on assets of banks that exceed 2% of gross domestic product (GDP). The selected lenders are then assessed on the four systemic importance buckets—size, interconnectedness, substitutability and complexity. Based on the bucket in which a D-SIB is placed, an additional common equity requirement has to be applied to it.

> Such classification means the collapse of these lenders could have a cascading impact on the entire financial system and the economy. Considering their status, D-SIBs are mandated to maintain a progressively higher share of risk-weighted assets as tier-I equity, which is **a measure of the bank's core** capital.

- The first list D-SIBs was released in 2015, in which SBI and ICICI Bank were named systemically important. Out of the four systemic importance buckets, SBI falls in bucket three, while ICICI Bank and HDFC Bank are in bucket one.

- The additional capital requirement for D-SIBs have kicked in phase-wise since April 2016 and will be fully effective from April 2019. In case of HDFC Bank, the additional capital surcharge will be applicable from 1 April 2018.

- For D-SIBs, while there are additional capital requirements, there is advantage in the form of lower borrowing costs. This is because the overall perception of the bank should improve on account of the regulatory tag of being a systemically important bank, creating an expectation of government support in times of financial distress.

- According to D-SIB Framework, in case a foreign bank having branch presence in India is a Global Systemically Important Bank (G-SIB), it has to maintain additional CET1 capital surcharge in India as applicable to it as a G-SIB, proportionate to its Risk Weighted Assets (RWAs) in India.

Task Force on Employment & Exports

The government has constituted a task force headed by Rajiv Kumar (NITI Aayog vice chairman) to lay down the roadmap for employment generation through export promotion. It will seek expansion of formal sector for creation of well paid jobs in the country.

Among other things, the task force will propose 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, as per its terms of reference.

Its other terms of reference include 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.

Recommending sector-specific policy interventions in key employment sectors, 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 and issues related to logistics, export credits and trade facilitation are its other terms of reference.

Global Human Capital Index

Why in News

India ranked at a lowly 103rd position, which is the lowest among BRICS economies, on the Geneva based World Economic Forum's (WEF) Global Human Capital Index (GHCI).

It measures 130 countries against four key areas of human capital development;

1. Capacity (determined by past investment in formal education),
2. Deployment (accumulation of skills through work),
3. Development (continued upskilling and reskilling of existing workers) and
4. Know-how (specialised skills-use at work).

It takes into account five distinct age groups to capture the full human capital potential profile of a country

India ranks 118 for labour force participation among the key 35-54 year old demographic, suggesting far too many Indians are engaged in informal or subsistent employment. 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 years old is 110th for example) and low deployment of its human capital, meaning the skills available are not getting put to good use.

Mains question= How nations develop their human capital can be a more important determinant of their long-term success than virtually any other factor. Discuss the factors which are responsible for low Human Capital formation in India. Also suggest measures to improve India's ranking in Global Human Capital Index.

> The *Report* defines "human capital" as the knowledge and skills people possess that enable them to create value in the global economic system.
> According to the report, 62% of human capital has now been developed globally.
> India was ranked 105th on this list last year, while Finland was on the top which has been pushed by Norway to second place this year.

PEPPER IT WITH
Global Hunger Index, world Investment Report.

Page 60

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Khelo India Campaign

The Union Cabinet has approved a total budget of 1,756 crore for the next **three years for the revised project of 'Khelo India', which would aim to combine 'sports for all' and 'sports for excellence'.**

- As part of the drive, every year 1000 talented youngsters, in specific sports disciplines, would be identified and given a financial support of Rs 5 lakh each per year, for eight consecutive years.
- The ambitious programme aims to cover about 20 crore children in the age group of 10 to 18 in a national physical fitness drive and support them suitably to achieve the target.
- **The restructured 'Khelo India' scheme is expected to have a** favourable impact on the sports ecosystem, in terms of infrastructure, community sports, talent identification, coaching for excellence, competition structure and sports economy.

PEPPER IT WITH
Mission XI Million

Exercise Yudh Abhyas

Why in News

13th edition of the exercise is being hosted by USA from 14 to 27 September. Exercise Yudh Abhyas is one of the largest joint running military training and defence corporation endeavors between India and USA. It is hosted alternately between the two countries. The exercises provide an opportunity to the armed forces of both countries to train in an integrated manner at the battalion level with joint planning at the brigade level.

The exercise started in the year **2004** under US Army Pacific Partnership Program. It strengthens and broadens interoperability and cooperation between the Indian and US armies. The exercise is also an ideal platform to learn from each-**other's experiences of planning and execution of operations.**
The exercise is being conducted within the scope of Counter Insurgency and Counter Terrorism Operations under the charter of the United Nations.

PEPPER IT WITH
Exercise Ekuverin.

Navika Sagar Parikrama

Defence minister flagged-off Indian Naval Sailing Vessel Tarini (INSV Tarini) with an all women crew from INS Mandovi boat pool, Goa.

- This is the first-ever Indian circumnavigation of the globe by an all-women crew and shall attempt to circumnavigate the globe on **Indian Navy's sailing vessel INSV Tarini.**
- The crew is expected to return to Goa in April 2018, on completion of the voyage.
- The expedition will be covered in five legs, with stop-overs at 4 ports viz. Fremantle (Australia), Lyttleton (New Zealand), Port Stanley (Falklands), and Cape Town (South Africa).

125th anniversary of Swami Vivekananda's Chicago Speech

Prime Minister **addressed the students' convention on the theme of** 'Young India, New India'**, on occasion of 125th anniversary of Swami Vivekananda's** Chicago address and Pt. Deendayal Upadhyaya's centenary celebrations, on September 11, 2017. Swami Vivekananda delivered his historic address at Chicago in 1893.
Swami Vivekanand was born in 1863 in and he died in in 1902.
He practiced advaita Vedanta philosophy. Some of his important publications were Karma Yoga (1896); Raja Yoga (1896); Lectures from Colombo to Almora (1897); My Master (1901).

PEPPER IT WITH
Pt. Deendayal Upadhyaya and Advaita philosophy.

Astra Missile

Why in News

Astra, the beyond-visual-range air-to-air missile(BVRAAM), is now set for production and induction into the armed forces.

The indigenous missile system developed by the Defence Research Development Organisation, with the active participation of several private industries and the Hindustan Aeronautics Limited, will be manufactured by the Hyderabad-based Bharat Dynamics Limited (BDL).

> **PEPPER IT WITH**
> US navy's Skyknight missile

- The final Development Flight Trials of Astra - BVRAAM were successfully conducted over the Bay of Bengal, Off the Coast of Chandipur, Odisha.
- The missile, when fired from the aircraft, does not have its target in view. However, once the target is locked, the missile, which has a high energy propellant, has the capability to follow it while the seeker helps keeping the target in focus.

> DRDO was formed in 1958 from the amalgamation of the then already functioning Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO).

- The missile has been designed to be capable of engaging high-speed targets at short range, up to 20 km in tail chase mode and long range, up to 80 km in head-on chase mode as per DRDO.
- At sea level it has a range of up to 20 km but could have a range of 44 km from an altitude of 8,000 m and 80 km if launched from an altitude of 15,000 m.
- DRDO claims that the missile is an all-weather weapon.

3rd Generation Anti-Tank Guided Missile – NAG

Why in News

India's indigenously developed 3rd generation Anti-Tank Guided Missile (ATGM), Nag has been successfully flight tested twice by DRDO against two different targets in the ranges of Rajasthan.With these two successful flight trials, and the flight test conducted earlier in june, the completefunctionality of Nag ATGM along with launcher system NAMICA has been established and marked the successful completion of development trials of Nag Missile.

> **PEPPER IT WITH**
> Helina TGM

- It is incorporated with many advanced technologies including the Imaging Infrared Radar (IIR) Seeker with integrated avionics, a capability which is possessed by few nations in the world.
- Nag is a fire-and-forget ATGM with an estimated range of 4 kilometers.
- The Nag Missile Carrier (NAMICA) is an Indian license-produced variant of the Soviet-era BMP-II armored infantry fighting vehicle.
- NAMICA can launch Nag missiles from a retractable armored launcher that contains four launch tubes (the armored vehicle can carry up to 12 missiles in total) and the guidance package including a thermal imager for target acquisition.
- **The missile's targeting system is based on visual identification** prior to its launch **('lock-on before-launch system').**

Peer-to-Peer Lending (P2P)

Why in news

A government has said that Peer-to-peer lending (P2P) platforms will be treated as non-banking financial companies (NBFCs) and thus will be regulated by the RBI.

- The notification will help P2P lenders gain official recognition, opening new avenues for fund-raising and business expansion.
- It also ends the regulatory vacuum in which these firms were operating.
- These firms have now been officially recognized. The regulatory purview of RBI will lend the sector more credibility.
- The notification will allow more access to institutional funding.

> Crowd Funding' generally refers to a method of funding a project or venture through small amounts of money raised from a large number of people, typically through a portal acting as an intermediary. While crowd funding - equity, debt based and fund based-fall under the purview of capital markets regulator (SEBI), P2P lending would fall within the domain of the Bank.

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 by mutual agreement between the borrower and the lender. Fees are paid to the platform by both the lender as well as the borrower. The platform provides the service of collecting loan repayments and doing preliminary assessment on the borrower's creditworthiness. The platforms do the credit scoring and make a profit from arrangement fees and not from the _spread_ between lending and deposit rates as is the case with normal financial intermediation. Some countries like Israel and Japan have prohibited P2P lending.

> PEPPER IT WITH
> Differences between NBFCs and banks.

Interconnect Usage Charge (IUC)& BAK Regime

TRAI has cut IUC or mobile termination charge (MTC) to 6 paise a minute from October 1, 2017. IUC will be brought down to zero paise from January 1, 2020 while moving to BAK.

IUC is a fee that one telecom company pays to another when a call **from the former's network lands on the latter's. The charge is levied** on a per minute basis.

What is BAK (Bill and Keep)- Bill and Keep is a mechanism under which there is no interconnect charge, one telecom company (telcos) does not pay another, but keeps a record of the calls made to the **other's network. Since the call traffic from one to** the other and vice versa is almost similar, especially among large telcos, the call volumes usually get cancelled out.

Reasons behind BAK regime- New technology is being brought in. Data is the new raw material. The cost for telcos to produce a call will be next to insignificant going forward and there will be no need to have a termination charge.

> Jan,2004= Calling Party Pays (CPP) rule was introduced in India where incoming calls could not be charged, thus only IUC could be levied.
> Feb, 2004= IUC was charged at 30 paise a minute
> TRAI charts out zero IUC from January 1, 2020 under BAK.

Conclusion

- The scrapping of IUC from January 2020 implies that operators can charge for incoming voice minutes, although it is unlikely, given the extent of competition and continuous move towards lower pricing of voice.
- This move is likely to keep the competitive intensity for the industry high and prolong the restoration of pricing power, a must for all operators to generate adequate return on investments

Graded Surveillance Measure

Why in News

The BSE website has mentioned a list of more than 900 companies that are monitored under the Graded Surveillance Measure, designed by market regulator Securities and Exchange Board of India (SEBI).

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.

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.

PEPPER IT WITH
Sensex, BSE, Dormant and Shell companies

- 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.
- 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.
- As and when a security is shifted to various levels of surveillance, it is publicly announced on a daily basis on BSE and NSE websites as well as through circulars to the stock brokers.
- This indirectly may also be an indication that the sudden rise in either the volumes traded or the price increase are not commensurate with the fundamentals of the said companies and hence small / retail investors are protected from getting stuck in such stocks inadvertently on some wrong advice.

Additional Surveillance Deposit (ASD) is applicable when securities of the company move to Stage II of GSM framework and above. **The 'buyer' of the security is** liable to pay the ASD for securities shortlisted. It is retained for a period of 5 months

- The only 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. Of course, 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.

Bharat Ke Kaushalzaade

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.

Staying true to the spirit of Antyodaya Mission, which lies in 'reaching out to the last person, the event, was graced by candidates and alumni 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).

The event was significant as it marked 3 years of Ministry of Rural Development announcing DDU-GKY with a focus on building capacity of rural youth to address the needs of domestic and global skills requirements.

DDU-GKY not only offers industry relevant skill training to candidates, it also works closely with industry and leading corporates to strengthen the post-training employment scenario for its trainees.

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

PEPPER IT WITH
National Policy on Skill Development and Entrepreneurship 2015 National Skill Development Mission Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

- 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.
- 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.

NITI Aayog & IRF Geneva

Why in News

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

The objective of the SoI 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:

1) Traffic Management,
2) Parking Management,
3) Electronic Enforcement of Traffic Rules and Regulations,
4) Fleet Management and Monitoring,
5) Innovation in the field of ITS, and
6) Education in the field of ITS.

International road Federation
• It was founded in 1948.
• It is a nongovernmental, not-for-profit organization.
• IRF aims 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 will contribute to the Government of India's SMART City Program, the Make in India initiative, and to a host of other initiatives aimed at the economic and social development of India.

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

PEPPER IT WITH
The Global status report on road safety.
Motor Vehicles Act.

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.

Road Safety in India

- India has the second largest road network in the world with over 3 million km of roads of which 60% are paved. Road safety is emerging as a major social concern in the country.
- In India a death occurs every 3.5 minutes due to road accidents
- Road accidents in the country have decreased by around 4.1% during 2016, with the year seeing 4,80,652 road accidents as against 5,01,423 in 2015. However fatalities resulting from these accidents have risen by about 3.2% during the same period.
- During 2016, 13 States accounted for 86 per cent of the total road accidents in the country.
- The age profile of road accident victims for 2016 reveals that the youth of age group 18 - 35 years accounted for 46.3 per cent and age group of 18-45 accounted for a share of 68.6% and working age group of 18-60 accounted for a share of 83.3 per cent in the total road accident fatalities.
- The National Highways accounted for 29.6 per cent of total road accidents and 34.5 per cent of total number of persons killed.
- Among the vehicle categories, two wheelers accounted for the highest share in total number of road accidents (33.8 per cent), and 34.8% of total persons killed.

Economic Advisory Council (EAC)

Recently, the government inducted Rajiv Kumar, former economic adviser in the finance ministry, as the chairman of NITI Aayog. Govt also extended the tenure of Arvind Subramanian, known for his out-of-the-box ideas, as chief economic adviser by a year.

The EAC has been reconstituted with Dr Bibek Debroy, member of the NITI Aayog, as its chairman. There are four other members in the council.

- The mandate given to the council states "analyse any issue, economic or otherwise, referred to it by the prime minister and advising him there on".
- It is also expected to keep a close watch on the macroeconomic issue and advise the PM accordingly.
  This could be either suo-motu or on reference from the Prime Minister or anyone else.
- The EAC-PM is an independent body to give advice on economic and related issues to the Government of India, specifically to the Prime Minister.
- EAC had been rendered defunct after the previous UPA government demitted office in May 2014. The last chairperson of the Council was former Reserve Bank of India Governor C. Rangarajan.
- The formation of the Council at this time suggests it could **play a critical role in reviving the economy's growth** momentum that has slumped over the past few quarters, with the first quarter of this financial year clocking just 5.7% growth, down from 7.9% a year ago.

> PEPPER IT WITH UNCTAD, Twin balance sheet problem

   The intention behind the advisory council is to help in reviving the economy since growth stagnation is a serious issue. What is important for the government is to clearly distinguish the role of NITI Aayog, economic advisory council and the chief economic adviser.

Modernisation of Police Forces (MPF)

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.

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. Police **and 'law and order' fall** under the VIIth Schedule in the Constitution of India.

Salient Features of MPF

- 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.
- 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.
- 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.

> National Crime Records Bureau (NCRB)
> - It is the nodal agency under MoHA
> - For collection and dissemination of information related to crime in India.
> - Publishes an annual report called Crime in India, that records crime on the basis of the FIRs
>
> In Prakash Singh case, the Supreme Court ordered that the states and union territories were to comply with seven binding directives which would kick-start the reforms. Limit political control, Appointment based on merit, Fix minimum tenure, Separate police functions, Set up fair and transparent systems, Establish a Police Complaints Authority in each state and Set up a selection commission.

- It also provides for setting up of a State-of Art forensic science laboratory in 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.
- New initiatives are being 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. Police Stations will be integrated to set up a national data base of crime and crim**inals' records.**

Problems with police force

An overburdened police force

- In India the actual strength of police as per data was 137. Note that the United Nations recommended standard is 222 police per lakh persons. Presently, State police forces had 24% vacancies (about 5.5 lakh vacancies) in January 2016.
- Crime per lakh population has increased by 28% over the last decade (2005-2015). However, convictions have been low. The Law Commission has observed that one of the reasons behind this is the poor quality of investigations.

Improving police infrastructure

- CAG audits have found shortages in weaponry with state police forces.
- The Bureau of Police Research and Development has also noted a 30.5% deficiency in stock of required vehicles with the state forces.
- Funds dedicated for modernisation of infrastructure are typically not utilised fully.

Holding police accountable

- In India, the political executive (i.e., ministers) has the power of superintendence and control over the police forces to ensure their accountability. However, the Second Administrative Reforms Commission has noted that this power has been misused, and ministers have used police forces for personal and political reasons. Hence, experts have recommended that the scope of the political executive's power must be limited under law.

The umbrella scheme is a positive step and generous financial grants will definitely help. But these must be followed up by structural reforms in the police. The roadmap for the same was laid down by the Supreme Court in 2006 in what is popularly referred to as Prakash Singh case.

Way Forward

- Institutions like the state security commission, police establishment board and complaints authority must be set up in every state in keeping with the directions of the Supreme Court.

> **PEPPER IT WITH**
> Smart police, Soli Sorabjee Committee

- It is time that the GoI seriously thinks about bringing police and public order in the Concurrent List of Schedule VII of the Constitution.
- The Second Administrative Reforms Commission and the Supreme Court have observed that there is a need to have an independent complaints authority to inquire into cases of police misconduct. In this case we can follow on the steps of United Kingdom which has an Independent Office for Police Conduct, comprising of a Director General appointed by the crown, and six other members appointed by the executive and the existing members, to oversee complaints made against police officers.
- The Padmanabhaiah Committee had recommended that recruitment to constabulary should be restricted till a teeth-to-tail ratio of 1:4 is achieved as against present ratio, which ranges from 1:7 to 1: 15 in different states.
- Police public relations should improve and community policing must be enlarged.

India International Science Festival-2017

Why in News

The 3rd edition of IISF 2017 will be held in Chennai during 13-16 October, 2017.

Emphasizing the role of technologies and innovation, India has declared 2010-**20 as the 'Decade of Innovation'.** The Ministry of Science and Technology, Ministry of Earth Sciences, and Vijnana Bharati (VIBHA) have come together to organize The India International Science Festival (IISF) every year, since 2015 to encourage scientific temper among the masses and showcasing Indian contribution in the field of S&T over the years. The previous two editions of IISF were held in New Delhi.

> **PEPPER IT WITH**
> National Innovation Foundation, National Mission on Deep Ocean Research

The prime objective of the festival is to instill scientific temper **among the masses and showcasing India's contribution in** the field of S&T over the years. It aims to build a strategy for rural India through the advancement of Science and Technology. Further, the science festival also intends to make innovation beneficial for the people and develop technology that is affordable to the masses.

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 67

Global Competitiveness Rankings

Why in News

India remains the most competitive country in South Asia, appearing at No. 40 (slipping from 39) in the global competitiveness ranking of 137 countries by the World Economic Forum (WEF) which is topped by Switzerland.

- The score improves across most pillars of competitiveness, particularly infrastructure (66th, up by two), higher education and training (75th, up by six), and technological readiness (107th, up by three), 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.

- A 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.

- **According to WEF's Executive Opinion Survey 2017,** corruption is 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.

- Among the BRICS, China and Russia are placed above **India. "Improving ICT infrastructure and use remain** among the biggest challenges for the region: in the past decade, technological readiness stagnated the most in **South Asia,"** WEF said.

- Countries preparing for the Fourth Industrial Revolution and simultaneously strengthening their political, economic and social systems will be the winners in the competitive race of the future.

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.

PEPPER IT WITH
The fourth industrial revolution.

United Nations Conference on Trade & Development (UNCTAD)- UNCTAD is a permanent intergovernmental body established by the United Nations General Assembly in 1964 & is headquartered at Geneva. UNCTAD is part of the UN Secretariat & reports to the UNGA and the Economic and Social Council of UN but have its own membership, leadership, and budget. It is also a part of the United Nations Development Group. It also publishes world Investment Report.

Trade & Development Report-2017

Why in News

According to the **UNCTAD's 'Trade and Development Report, 2017'** which was released recently, Growth of world economy is expected to reach 2.6%, slightly higher than in 2016 but well below the pre-financial crisis average of 3.2%.

- **The report said that India's grow**th performance depends to a large extent on reforms to its banking sector, which is burdened with large volumes of stressed and non-performing assets, and there are already signs of a reduction in the pace of credit creation.

- It also mentioned that since debt-financed private investment and consumption have been important drivers of growth in India, the easing of the credit boom is likely to slow GDP growth.

- It calls for stronger measures to protect domestic sectors against the undue domination of large companies, particularly in high-profit sectors such as pharmaceuticals, media and

Page 68

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

information and communications technology (ICT), where foreign companies still account for most of the transfer of profits across borders.

- It further added that even if the current levels of growth in both China and India are sustained, it is unlikely that these countries will serve as growth poles for the global economy in the near future.
- In sharp contrast to the ambitions of the 2030 Agenda for Sustainable Development, the world economy remains unbalanced in ways that are not only exclusionary, but also destabilizing and dangerous for the political, social and environmental health of the plane
- At the same time, a combination of too much debt and too little demand at the global level has hampered sustained expansion of the world economy. Austerity measures adopted in the wake of the global financial crisis nearly a decade ago have compounded this state of **affairs. Such measures have hit the world's poorest communities the hardest, leading to further polarization and heightening people's anxieties about what the future might hold.**
- *The Trade and Development Report 2017* argues that now is the ideal time to crowd in private investment with the help of a concerted fiscal push – a global new deal – to get the growth engines revving again, and at the same time help rebalance economies and societies that, after three decades of hyper globalization, are seriously out of kilter.

INS Tarasa

Why in News

INS Tarasa, a Water Jet Fast Attack Craft (WJFAC) was commissioned into the Indian Navy.

INS Tarasa is the fourth and last of the follow-on WJFAC's built by the Garden Reach Shipbuilders and Engineers (GRSE), Kolkata. These ships are an upgrade of the Car Nicobar class Fast Attack Crafts with the Indian Navy, which were also indigenously designed and built by GRSE, Kolkata.

About WJFAC

Water Jet Fast Attack Craft Promises to transform Naval Shoreline operation by packing a powerhouse punch of agility and speed. The ships are to meet critical requirement of crafts with improved stealth at networking capabilities. These WJFACs are ideally suited for interception of fast moving surface craft and performs anti-smuggling, fishery protection and search & rescue operations. The ship is fitted with Hamilton Water Jets which is the most advance and innovative marine Propulsion System in use today. There maximum speed is 35 Knots (65kmph).

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.

Arpan Version 3.0

Arpan software for Defence Security Corps was launched recently by Deputy Chief of Army Staff.

- The ARPAN software consisting of seven modules facilitates end to end human resource, financial management of Junior Commissioned Officers and Other Ranks with major functional advantages of timely processing of postings, promotions, release of salary, publication of personal occurrences and processing of pension.
- The software provides valuable data for decision and policy making for the Defence Security Corps Directorate.
- After launch of this software, Defence Security Corps troops would be able to access their service profiles, statement of accounts and adjustment of allowances at par with the troops of Indian Army.
- The software has been developed by Tech Mahindra.

NCLAT

The Ministry of Corporate Affairs (MCA) in 2016 notified the constitution of National Company Law Tribunal (NCLT) and National Company Law Appellate Tribunal (NCLAT).

NCLAT was constituted under Companies Act, 2013 for hearing appeals against the orders of National Company Law Tribunal(s) (NCLT), with effect from 1st June, 2016.

NCLAT is also the Appellate Tribunal for hearing appeals against the orders passed by NCLT(s) under Section 61 of the Insolvency and Bankruptcy Code, 2016 (IBC). It is also the Appellate Tribunal for hearing appeals against the orders passed by Insolvency and Bankruptcy Board of India under Section 202 and Section 211 of IBC.

| PEPPER IT WITH |
| Company Law Board & Board of Industrial and Financial Reconstruction, Eradi committee |

It also hears and disposes appeals against any direction issued or decision made or order passed by the Competition Commission of India (CCI).

Appeals from the NCLAT will be heard by the Supreme Court of India. NCLAT are under a mandate to dispose of cases before them as expeditiously as possible. In this context, a time limit of 3 months has been provided to dispose of cases, with an extension of 90 days for sufficient reasons to be recorded by the President or the Chairperson, as the case maybe. This time limit is expected to ensure the speedy disposal of cases by the NCLT and the NCLAT.

Masala Bond

Why in News

The Reserve Bank of India has removed masala bonds, or rupee-denominated debt securities sold abroad, from the corporate bond investment limit.

Currently, the limit for investment by foreign portfolio investors (FPIs) in corporate bonds is Rs 2,44,323 crore. This includes issuance of rupee-denominated bonds overseas by resident entities. Masala Bonds are presently reckoned both under combined corporate debt limit (CCDL) for FPI and external commercial borrowings (ECBs).

With effect from October 3, 2017, Masala bonds will form part of the ECBs and will be monitored accordingly. The revised limit is expected to result in higher FPI flows and a likely compression in corporate bond spreads. Bringing masala bonds under the ECB framework will ensure better monitoring framework, especially onsources and the purpose of investment.

| |
| Foreign portfolio investment consists of securities and other financial assets passively held by foreign investors. It does not provide the investor with direct ownership of financial assets and is relatively liquid depending on the volatility of the market. |

| PEPPER IT WITH |
| Financial Action Task Force & International Finance Corporation. |

What is Masala Bond

- Masala bonds are Indian rupee denominated bonds issued in offshore capital markets and are settled in dollars so, therefore, the currency risk resides with investors.
- With Masala Bond, Indian corporates have more option to blend their debt portfolio to optimize the liability and minimize the cost. Further, it can be a launch pad to sell the strength of rupee to the overseas investors.
- The investor set is more broad-based than just FIIs (foreign institutional investors), as these instruments can usually be sold to other investors who prefer the fact that these are listed.
- **The "Masala bonds" marked the first rupee** bonds listed on the London Stock Exchange.
- **IFC named these 'Masala' bonds as 'masala' is a globally recognized term that evokes the** culture and cuisine of India. This is not the first time that a bond has been named after the food or culture of a country. Chinese bonds, for example, are called Dim sum bonds, and Japanese ones as Samurai bonds.

Page 70

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

India Joins Race in 5G Ecosystem

Why in News
Government has set up a high-level forum that will evaluate and approve roadmaps and action plans to bring in 5G latest technology in the country. The government has included ministries of telecom, information and technology, and science and technology, in the forum and has set aside a corpus of Rs 500 crore for research and development in 5G.

As per the OECD (Organization for Economic Cooperation and Development) Committee on Digital Economic Policy, 5G technologies rollout will help in Increasing GDP, Creating Employment & Digitizing the economy.

The primary goals of the forum are to achieve:
- early deployment of 5G in India
- a globally competitive product development and manufacturing ecosystem targeting 50% of India market and 10% of global market over next 5 to 7 years.

For India, 5G provides an opportunity for industry to reach out to global markets, and consumers to gain with the economies of scale. Worldwide countries have launched similar Forums and thus, India has joined the race in 5G technologies. For India, 5G provides an opportunity for industry to reach out to global markets, and consumers to gain with the economies of scale.

Software-defined networking (SDN) and network functions virtualization (NFV) are going to play a key role for operators as they prepare to migrate from 4G to 5G and scale their networks quickly. SDN will be necessary for operators to **carve virtual "sub-networks"** or slices that can be then used for bigger bandwidth applications.

PEPPER IT WITH
International Telecommunication Union, IoT

- 5G technology will be leveraged for deployment of next-generation broadband infrastructure, through which the government aims to have 100% coverage of 10 Gbps broadband across urban India and 1 Gbps across rural India.
- India wants to grab the 5G wave early on and has already begun consultations on holding auctions of 5G spectrum, which would be the first for the country where 4G adoption is still at a nascent stage.
- The Telecom Regulatory Authority of India (TRAI) recently floated a consultation paper, asking stakeholders on the timing and quantum of spectrum in the 3300-3400 Mhz and 3400-3600 Mhz bands to be used for 5G.
- The International Telecommunication Union (ITU), which will finalise the standards, has already proposed key performance requirements for the fifth-generation mobile technology.
- Even though the data speeds for 5G cannot be ascertained yet since the technology is yet to be deployed, ITU recently proposed the downlink peak rate for 5G at 20 gigabits (or 20,000 megabits) per second.
- The fastest speeds commercially available are on the LTE-Advanced, offering peak rates up to 1 gigabits.

Minimum Support Price for Minor Forest Produce

Why in News
National **Workshop organized by TRIFED on "**Minimum Support Price (MSP) for Minor Forest Produces (MFP) scheme.
Minimum Support Price for Minor Forest Produce is already implemented in 9 States and now it has been expanded nationwide with the help of this workshop. Minister of tribal affairs said that MFP collection centres should also be depots of daily requirements to sell items of daily need to the tribals. He said that after minerals, MFP could be the largest generation of revenue.
At present Minimum Support Price will be given for 24 Minor Forest Produce but gradually efforts will be made to increase the number of Minor Forest Produce. Non-wood forest products, generally termed as MFP means all non-timber forest produce of plant origin.
✓ The scheme is applicable for implementation in all the States across India.

- ✓ The scheme seeks to institutionalize various medium & long term aspects of sustainable collection, value addition, market infrastructure development, knowledge base expansion of MFPs, market intelligence development etc.
- ✓ Ministry of Tribal Affairs, Government of India is the Nodal Ministry for implementation of the scheme which will announce MSP for the selected MFPs with the technical support from TRIFED.
- ✓ TRIFED will act as the Central Nodal Agency for implementation and monitoring of the scheme through State level implementing agencies.
- ✓ State designated agencies will undertake procurement of notified MFPs directly from MFP gatherers (individual or collectives) at haats notified procurement centers at grass root level at prefixed MSP and ensure full & timely on the spot payment to MFP gatherers.

> **The Tribal Cooperative Marketing Development Federation of India Limited (TRIFED)**
> - Came in to existence in 1987 and got registered under the Multi-State Cooperative Societies Act 1984 (now the Multi-State Cooperative Societies Act, 2002).
> - Main objective is to serve the interests of its members in more than one State for the social and economic betterment of its members by conducting its affairs in professional, democratic and autonomous manner through self-help and mutual cooperation for undertaking marketing development of the tribal products.
> - Head Office is in New Delhi and has a network of 15 Regional Offices.
> - It has been doing the retail marketing of tribal products through its outlets under the brand name called 'TRIBES INDIA' and also through 13 State Emporia on consignment basis.
> - In order to have institutional support to marketing initiatives, TRIFED has signed an MOU with M/s Amazon Seller Services Pvt. Ltd for sale of tribal products through www.amazon.in.

Why MSP for MFP is needed?

Tribals constitute 8.6% of our population. MFP is very important to tribals economy. There is lack of proper storage facility and logistics. It is, therefore, important for the Government to intervene for supporting them. The MSP for MFP Scheme provides a safety net for these tribals. Although the Scheme was launched in 2014 it had mixed result for various reasons. Some states did well but in several other States the Scheme is yet to take off.The State has to play the role of as active player and not remain a mere spectator.

> **PEPPER IT WITH**
> Forest rights Act, PESA ACT, CACP, MFPNET and national SC/ST hub confluence

Benefits

- The scheme will touch the lives of tribal people involved in collection of MFPs across all the States and help optimum utilization of natural resources in a sustainable manner.
- This scheme will be an important milestone in economic development of tribals.
- MFP is a major source of livelihood for tribals who belong to the poorest of the poor section of society. It provides them critical subsistence during the lean seasons, particularly for primitive tribal groups such as hunter gatherers, and the landless. Tribals derive 20-40% of their annual income from MFP on which they spend major portion of their time.
- This activity has strong linkage to **women's financial** empowerment as most of the MFPs are collected and used / sold by women. MFP sector has the potential to create about 10 million work days jobs annually in the country.
- It is a holistic scheme for development of MFP trade including its value chain and necessary infrastructure at local level.

Ban Lifted on Export of Tur, Urad and Moong

Pulses export have been banned since 2006-07 but due to record production of 22.4 million ton in 2016-17 crop year as against 16.35 million ton in the previous year Government of India has lifted the ban on export of tur, urad and moong dal after a gap of 10 years.

Directorate General of Foreign Trade (DGFT) said it had removed the ban on export of tur, urad and moong dal with immediate effect. Opening of the export of pulses will help the farmers to get remunerative prices and encourage them to expand sowing area in coming season. However, exports of these varieties of pulses can be undertaken after taking permission from Agricultural and Processed Food Products Export Development Authority (APEDA).

Currently, only organic pulses and kabuli chana are allowed to be shipped in limited quantity.

More About Pulses

- Pulses are leguminous crops. **The term "pulses" is limited to crops harvested solely for dry grain.**
- India is the largest producer (25% of global production), consumer (27% of world consumption) and importer (14%) of pulses in the world. Pulses account for around 20 per cent of the area under foodgrains and contribute around 7-10 per cent of the total foodgrains production in the country.
- Though pulses are grown in both Kharif and Rabi seasons, Rabi pulses contribute more than 60 per cent of the total production.
- Gram is the most dominant pulse having a share of around 40 per cent in the total production followed by Tur/Arhar at 15 to 20 per cent and Urad/Black Matpe and Moong at around 8-10 per cent each.
- Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh and Karnataka are the top five pulses producing States. Productivity of pulses is 764 kg/ha.
- Per capita net availability of pulses in India, however, has reduced from 51.1 gm/day (1971) to 41.9 gm/day (2013) as against WHO recommendation of 80gm/day. This raises question **about the nutritional aspect as pulses are considered to be 'poor man's protein'. I**
- t is estimated that pulses contain 20-25 per cent of protein by weight and have twice the protein available in wheat and thrice that is present in rice.
- In addition to its nutritional advantage, pulses have low carbon and water footprints which make them an integral part of the sustainable farming system.

VASTRA 2017

Why in News

6th Edition of the 4-day international textiles and apparel fair VASTRA 2017 took place in Jaipur.

VASTRA 2017 is an all-encompassing trade fair and conference on Textiles and Apparel presenting a fusion of the finest and the latest in textiles products. The event is jointly organized by Rajasthan State Industrial Development and Investments Corporation Limited (RIICO) and Federation of Indian Chamber of Commerce and Industry and is supported by the Government of Rajasthan. More than 50 countries and 13 Indian States are participating in VASTRA 2017.

VASTRA, since its inception in 2012 has created a space for itself in the calendar of international exhibitions on textiles and apparel. VASTRA-2016 generated US$ 17 million worth of business.

PEPPER IT WITH Pradhan Mantri Paridhan Rozgar Yojna, ATUFS

Special Package for Textiles, Apparels and Made-ups

VASTRA – 2017

- It will establish its name to newer heights and create a unique space in the textile/ apparel sector all across the globe.
- It would be a new paradigm in terms of relevance, quality and new product offerings in textiles and apparel while presenting enhanced business opportunities for all stakeholders.

It will be the combination of B2C component along with B2B. VASTRA-2017, as usual, will remain a B2B trade fair. First three days will be devoted exclusively to B2B and the last day will have B2C activities, involving retail sales. This will provide simultaneous opportunities to those exhibitors who may be looking for directly reaching the end users as well.

- VASTRA-2017, in its new setup, will provide much more enhanced business opportunity to all stakeholders.

Surya Kiran

The 12th **edition of joint military exercise between India & Nepal "Surya Kiran"** took place in Rupandehi district of the Himalayan nation focusing on counter-terrorism and forest fighting operations.

- According to the Indian Army officials, the Surya Kiran is the largest joint exercise in terms of troop participation.
- Disaster management and joint operations for disaster relief will also be a part of the exercise.
- The joint exercise will provide the two armies a platform to exchange experiences, ideas and skills.
- Surya Kiran series of exercises are held alternately in India and Nepal. The 11th edition of the joint exercise was held in Pithoragarh in Uttarakhand.

Ahmedabad gets 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. This was the 41st session of World Heritage Committee.

The honour makes the walled city of Ahmedabad the third in Asia to be on the list(Bhaktpur in Nepal and Galle in Sri Lanka). Founded in the 15th century by Sultan Ahmad Shah, on the eastern bank of the Sabarmati river, it presents a rich architectural heritage with 28 Archaeological Survey of India's centrally protected monuments from the sultanate period, notably the Bhadra citadel, the walls and gates of the Fort city and numerous mosques and tombs, as well as important Hindu and Jain temples of later periods. The urban fabric is made up of densely-packed traditional houses (pols) in gated traditional streets (puras).

> IUCN is an international, non-governmental organization that provides the World Heritage Committee with technical evaluations of natural heritage properties. It was established in 1948 and is located in Gland, Switzerland.
>
> ICOMOS provides the World Heritage Committee with evaluations of cultural and mixed properties proposed for inscription on the World Heritage List. It is an international, non-governmental organization founded in 1965, with its secretariat in Paris.
>
> *ICCROM is an intergovernmental organization created to promote the conservation of all forms of cultural heritage, in every region of the world. Its mission is to provide Member States with the best tools, knowledge, skills and enabling environment to preserve their cultural heritage in all of its forms, for the benefit of all people. Through its work, ICCROM is contributing to the environmental, social and economic sustainability of communities. It was established in 1959 in Rome, Italy.*

India now has a total of 36 World Heritage Inscriptions -- 28 cultural, 7 natural and 1 mixed site. 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.

In 1972, following the United Nations Conference on the Human Environment in Stockholm, Sweden, UNESCO adopted the Convention concerning the Protection of World Cultural and Natural Heritage—and thus the beginning of World Heritage Site listings. To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria.

Until the end of 2004, World Heritage sites were selected on the basis of six cultural and four natural criteria. With the adoption of the revised Operational Guidelines for the Implementation of the World Heritage Convention, only one set of ten criteria exists. Only countries that have signed the World Heritage Convention, pledging to protect their natural and cultural heritage, can submit nomination proposals for properties on their **territory to be considered for inclusion in UNESCO's World Heritage List.** The criteria are regularly revised by the Committee to reflect the evolution of the World Heritage concept.

Nomination process

A nominated property by a state is independently evaluated by two Advisory Bodies mandated by the World Heritage Convention: The International Council on Monuments and Sites (ICOMOS) and the International Union for Conservation of Nature (IUCN). The third Advisory Body is the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), which provides the Committee with expert advice on conservation of cultural sites, as well as on training activities.

Once a site has been nominated and evaluated, it is up to the intergovernmental World Heritage Committee to make the final decision on its inscription. Once a year, the Committee meets to decide which sites will be inscribed on the World Heritage List.

CONCEPT CLEARING ASSIGNMENT

1. In distribution sector, two major schemes; DDUGJY for rural areas and IPDS in urban areas are already under implementation- then what is the need for a new scheme Saubhagya?

    Suggest strategy for achievement of its target in a time bound manner.

2. 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. Enumerate step taken by Indian Government to eliminate hunger and malnutrition and comment on recently launched Zero Hunger Initiative.

3. Examine the main provisions of ADOPTION REGULATIONS 2017 and compare its implementation in accordance of International standards set under Hague Adoption convention. Also elucidate recent initiatives/scheme to support your answer.

4. "Government told the apex court that the presence of Rohingyas in the country posed national security threats while pointing out that intelligence inputs suggested links of some Rohingya immigrants with Pak-based terror groups". Can the Basic Humanitarian Rights be upheld in weight of national security? Comment in light of Rohingya Crisis.

5. Recently NITI Ayog suggested for 'Simultaneous Elections' in its Three Year Action Agenda. Critically analyse the effect of Simultaneous Election in comparison to present electoral system/cycle.

6. When does children's work become child labour and what are the reasons it exist and is so predominant in India? What is the NCLP in India doing to combat child labour? Also elucidate recent initiatives/scheme to support your answer.

7. The question whether Article 35A, relating to special rights and privileges of the citizens of Jammu and Kashmir, is ultra vires of the Constitution as decided in Keshvanand Bharti case. Bring out the critical issues associated with 35A and comment is it an ultra vire to constitution supporting your answer.

8. There seems to be different yardsticks for different refugees for availing citizenship in India. On one hand Chakma and Hajongs are provided with "limited citizenship' and Rohingya refugees are treated as security threats. Compare and comment in context of above mentioned crisis.

9. Given the vulnerability of Indian sports sector discuss the need for steps to be taken to stabilize, develop and transform Indian sports sector in light of International Sports facilities. Bring out the salient features of Khelo India Campaign.

10. Machine to machine (M2M), refers to technologies that allow both wireless and wired systems to communicate with other devices of the same ability. Examine its economic and ecological implications in future aspect. How should the M2M Service providers ensure protection of consumer interest and data privacy of the consumer?

11. While the maternity leave issue has finally been addressed, the problem still exists with paternity leave in India. In the absence of a law, each organization frames its own rules. Law makers and organizations need to take cognizance of this reality and tailor laws and policies accordingly. Comment.

12. Dairy Processing & Infrastructure Development Fund" (DIDF) is aimed atfocusing on building an efficient milk procurement system by setting up of chilling infrastructure and

installation of electronic milk adulteration testing equipment, creation/modernisation/expansion of processing infrastructure and manufacturing faculties for Value Added Products for the Milk Unions/ Milk Producer Companies. Discuss the benefits of DIDF for the farmers and how will it be able to generate employment in India.

13. After the global financial crisis of 2008 the concept of domestic systemically important banks (D-SIBs) and too big to fail banks came into limelight. Discuss the framework of Reserve Bank of India to disclose the names of banks designated as D-SIBs. D-SIBs enjoy certain advantages in funding markets but on the downside, expectations of government support amplifies risk-taking, reduces market discipline, creates competitive distortions and increases probability of distress in future. Critically analyse.

14. Government should come out with a way to provide appropriate regulatory and supervisory toolkit that facilitates the orderly growth of Peer to Peer (P2P) lending sector so that its ability to provide an alternative avenue for credit for the right kind of borrowers is harnessed. Discuss the arguments in favour and against regulating P2P lending sector.

15. In order to enhance market integrity and safeguard interest of investors, Securities and Exchange Board of India (SEBI) and Exchanges, have been introducing various enhanced surveillance measures such as reduction in price band, periodic call auction and transfer of securities to Trade segment from time to time. How can these be more effective for small/retail investors? Discuss.

16. India is a country today with 65% of its youth in the working age group. If ever there is a way to reap this demographic advantage, it has to be through skill development of the youth **so that they add not only to their personal growth, but to the country's economic growth as** well. Discuss measures to boost skill development in India.

PT ORIENTED QUESTIONS

1. Consider the following statements given below and choose the correct ones.
   1) Replacement level fertility may vary.
   2) Replacement level fertility with mortality rates is the total fertility rate—the average number of children born per woman—at which a population exactly replaces itself from one generation to the next, without migration.
   3) This rate is roughly 2.1 children per woman for most countries.

   Code:
   A) 1 and 2 only
   B) 2 and 3 only
   C) 1 and 3 only
   D) All of the above

2. Consider the following statements given below.
   1) Dairy Processing & Infrastructure **Development Fund" (DIDF) will be** managed by NABARD.
   2) It will provide subsidy to dairy sector.

   Which of the following is/are correct?
   A) 1 only
   B) 2 only
   C) Both 1 and 2
   D) Neither 1 nor 2

3. Consider the following statements and mark the INCORRECT one/ones.
   1) Fixed deposits are insured up to Rs. 1 lakh under the Deposit Insurance and Credit Guarantee Corporation (DICGC).
   2) **If a bank with 'too big to fail' tag** fails then it will cause disruptions in the economy.
   3) RBI is the first bank in India to get **the tag of "too big to fail bank".**

   Code:
   A) 1 only
   B) 2 and 3 only
   C) Only 3
   D) None of the above

4. Which among the following are NOT considered by World Economic Forum in computing Global Human Capital Index?
   1) Know-how
   2) capacity
   3) Development
   4) deployment

   Code:
   A) 1,2 and 3 only
   B) 2,3 and 4 only
   C) All of the above
   D) None of the above

5. Exercise Yudh Abhyas is held annually between which countries?
   A) India & USA
   B) India & japan
   C) India & Russia
   D) None of the above

6. Consider the following statements given below and mark the correct one/ones.
   1) Nag is a fire and forget missile.
   2) Astra is an all-weather missile.

   Code:
   A) 1 only
   B) 2 only
   C) Both 1 and 2
   D) Neither 1 nor 2

7. Consider the following statements given below.
   1) NBFCs cannot accept demand deposits.
   2) NBFCs cannot issue cheques drawn on itself.
   3) They are not registered under the companies act, 1956.

   Which of the following are correct?
   A) 1 and 2 only
   B) 2 and 3 only
   C) 1 and 3 only
   D) All of the above

8. Consider the following statements given below and mark the correct ones.
    1) SEBI is a non-constitutional & non statutory body.
    2) It provides protection and supply of accurate and correct information to the investors.
    3) It Prohibits Insider trading but **doesn't Checks Price Rigging.**
    A) 1 and 2 only
    B) 2 only
    C) 3 only
    D) 2 and 3 only

9. Consider the following statements given below and mark the correct one/ones.
    1) Ministry for Skill Development & Entrepreneurship (MSDE) was formed in 2014.
    2) Bharat Ke Kaushalzaade was organized by MSDE
    Code:
    A) 1 only
    B) 2 only
    C) Both 1 and 2
    D) Neither 1 nor 2

10. Which among the following given below cannot be considered as a reason behind the formation of Economic Advisory Council (EAC).
    1) Issue of unemployment and under-employment
    2) Recent downfall in economic growth
    3) Failure of RBI and MPC in controlling inflation.
    Code:
    A) 1 and 2 only   B) 2 and 3 only
    C) Only 2   D) All of the above

11. Which among the following are correct about global competitiveness Index (GCI)?
    1) It ranks nations on the basis of 12 pillars of competitiveness.
    2) WEF has used the same methodology for calculating GCI from beginning.

    3) In case of India there is a big gap between its innovative strength and technological strength.
    Code:
    A) 1 and 2 only
    B) 2 and 3 only
    C) 1 and 3 only
    D) All of the above

12. Which among the following statements are correct about National Company Law Appellate Tribunal (NCLAT)?
    1) NCLAT is the appellate tribunal for National company law tribunal only.
    2) Appeals from NCLAT can be heard by Supreme Court only.
    3) It cannot take more than 90 days to dispose a case
    Code:
    A) 1 and 2 only   B) 2 only
    C) 1 and 3 only   D) 3 only

13. Consider the following statements about Basavanna and choose the correct one/s
    1) He was the founder of Lingayat religion.
    2) His birth is celebrated as state festival in Tamil Nadu.
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) None of above

14. Which of the following are registered geographical indication(GI)
    1) Nagpur Orange
    2) Thanjavur Paintings
    3) Gobindobhog rice
    (a) 1 and 2   (b)   1 and 3
    (c) 2 and 3   (d)   All the above

15. TARANG mobile app is related to which sector
    (a) Telecommunication
    (b) Petroleum
    (c) Coal
    (d) DTH

KSG – (DELHI VN) 9717380832, (DELHI RN) 9811293743, (JAIPUR) 8290800441, (BHOPAL)7509975361, (PATNA) 7463950774, (INDORE) 7314977441, www.ksgindia.com

Page 78

16. What is the purpose of Vidyanjali **Yojana'?** (UPSC 2017)

    1. To enable the famous foreign educational institutions to open their campuses in India.

    2. To increase the quality of education provided in government schools by taking help from the private sector and the community.

    3. To encourage voluntary monetary contributions from private individuals and organizations so as to improve the infrastructure facilities for primary and secondary schools.

    Select the correct answer using the code given below :

    (a) 2 only   (b) 3 only
    (c) 1 and 2 only (d) 2 and 3 only

17. Choose the options which are correctly matched

    1) Mashelkar Committee - Smart city
    2) Subramaniam Committee- Education
    (3) Baswan committee - UPSC
    (a) 1 and 2   (b) 1 and 3
    (c) 2 and 3   (d) All the above

18. Which of the following rivers pass through Kaziranga National Park

    1) Manas
    2) Dhiplu
    3) Mora Dhansiri
    Code:
    (a) 1 and 2   (b) 1 and 3
    (c) 2 and 3   (d) All the above

19. Consider the following statements about Namdapha flying squirrel and choose the correct one/s

    1) It is endemic to Namdapha tiger reserve.
    2) It occurs in dry deciduous montane forests.
    Code:
    (a) 1 only   (b) 2 only
    (c) 1 and 2   (d) None

20. Consider the following statements about REDD (Reducing Emissions from Deforestation and Forest Degradation) and choose the correct one/s

    1) It is a program specially for developing countries.
    2) It is a program of World Bank.
    Code:
    (a) 1 only   (b) 2 only
    (c) 1 and 2   (d) None

21 Choose the correctly matched options

    1) Indira Sagar dam - Chambal river
    2) Krishnarajasagar dam - Krishna river
    3) Mettur Dam - Godavari river
    Code:
    (a) 1 and 2   (b) 1 and 3
    (c) 2 and 3   (d) None of above

22. Green Climate Fund was established in

    (a) Cancum Summit
    (b) Copenhagen summit
    (c) Doha summit
    (d) Warsaw Summit

23. Saanjhi Saanjh is

    (a) Scheme for welfare of disabled
    (b) Evening schools for poor children
    (c) Newspaper for old age citizens
    (d) None of above

24. Consider the following statements and choose the correct one/s

    1) PSLV is designed mainly to deliver the **"earth-observation" or "remote-sensing" satellites with lift**-off mass of up to about 1750 Kg to Sun-Synchronous circular polar orbits of 600-900 Km altitude.

    2) The GSLV is designed mainly to deliver the communication-satellites to the highly elliptical Geosynchronous Transfer Orbit (GTO).

    Code:
    (a) 1 only   (b) 2 only
    (c) 1 and 2   (d) None

25. Consider the following statements about India's first LIGO laboratory and choose the correct one/s
    1) It will be setup in Theni (Tamil Nadu)
    2) It will be second such laboratory in world.
    Code:
    (a) 1 only   (b) 2 only
    (c) 1 and 2   (d) None

26. Consider the following statements and choose the correct one/s
    1) Coffee club is a group which is bidding for permanent seat at UN security council.
    2) It is a group of 10 countries which are also member of G20.
    Code:
    (a) 1 only   (b) 2 only
    (c) Both   (d) None

27. Consider the following statements about Financial Action Task Force (FATF)
    1) FATF sets standards and promote effective implementation of measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.
    2) It was established in 1989 by OECD.
    Code:
    (a) 1 only   (b) 2 only
    (c) 1 and 2   (d) None

28. In which of the following national parks, snow leopards will be found:
    1) Hemis National Park
    2) Namdhapa national park
    3) Khangchendzonga National Park
    Code:
    (a) 1 and 2   (b) 1 and 3
    (c) 2 and 3   (d) All the above

29. Consider the following statements and choose the correct one/s
    1. The Directorate General of Civil Aviation (DGCA) is the Indian governmental statutory body for civil aviation under the Ministry of Civil Aviation.
    2. This directorate investigates aviation accidents and incidents.
    Code:
    (a) 1 only   (b) 2 only
    (c) 1 and 2   (d) None

30. Consider the following statements about Double Asteroid Redirection Test (DART)
    1) This mission will protect the planet from potential cosmic body impacts in the future.
    2) It is a program of European Space Agency.
    Code:
    (a) 1 only   (b) 2 only
    (c) 1 and 2   (d) None

Note: To enhance your knowledge regarding any topic given in Current Connect you can see source at our website: cc@ksgindia.com