

## My Notes....

### NATIONAL

#### GLOBAL HUNGER INDEX 2018

India has been ranked at the 103rd position among 119 countries on the Global Hunger Index 2018, says a report. According to the report, prepared by Welthungerhilfe and Concern Worldwide, India is among the 45 countries that have "serious levels of hunger". In 2017, India was ranked at the 100th position.

What

1. The GHI, now in its 13th year, ranks countries based on four key indicators -- undernourishment, child mortality, child wasting and child stunting.
2. Child wasting refers to share of children under the age of five who have low weight for their height, reflecting acute undernutrition.

3. India is ranked below many neighbouring countries, including China (25th spot), Nepal (72), Myanmar (68), Sri Lanka (67) and Bangladesh (86). Pakistan is placed at the 106th position.

4. The report said this year's GHI scores for South Asia and Africa south of the Sahara reflect serious levels of hunger.

5. Zero is the best score and a reading above 100 is the worst. The latter signifies that a country's undernourishment, child wasting, child stunting, and child mortality levels are at the highest level.

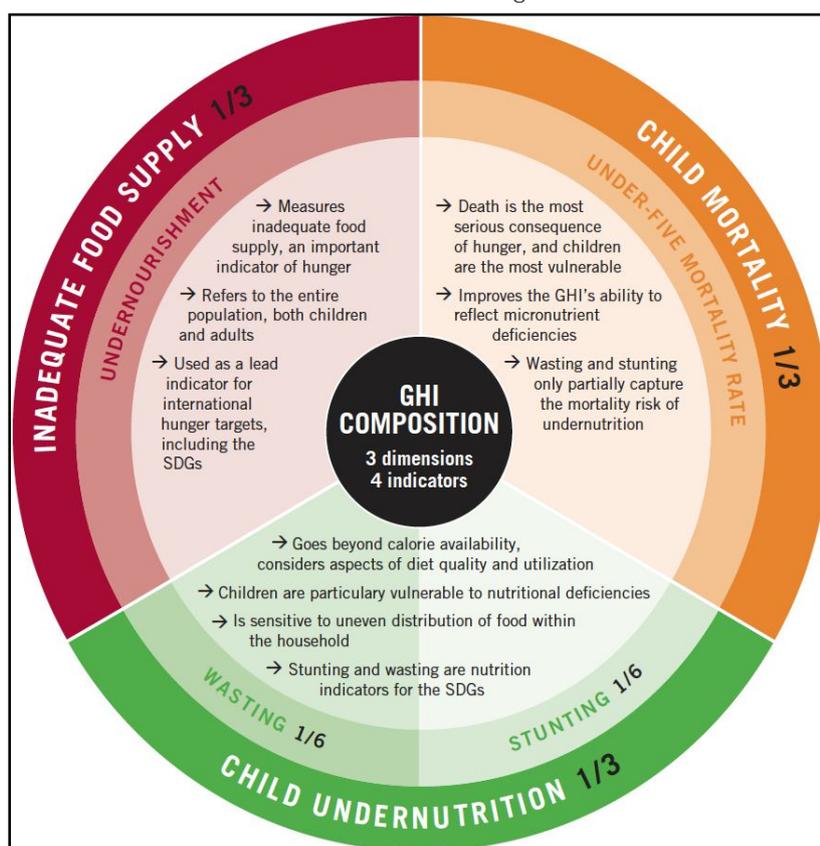
6. Further, the report, said that the world has made gradual, long-term progress in reducing overall hunger, but this progress has been "uneven".

7. Since the number of forcibly displaced people is on the rise, and hunger is often both a cause and a consequence of displacement, the report said that actions need to be taken by international community, national governments, and civil society, among others.

8. As per the report, around 124 million people suffer acute hunger in the world, a striking increase from 80 million two years ago while the reality of hunger and undernutrition continues to have a massive impact on the next generation.

9. About 151 million children are stunted and 51 million children are wasted across the globe. Hard-won gains are being further threatened by conflict, climate change, poor governance, and a host of other challenges, it added.

10. Welthungerhilfe is a not-for-profit group and Concern Worldwide works towards improving lives of poor people.



## INDIA JUMPS IN EASE-OF-DOING-BUSINESS

India jumped 23 places to come in at the 77th spot in the World Bank's latest ease-of-doing-business global rankings in 2018, a year after it had jumped 30 places. The **World Bank's 'Doing Business 2019: Training for Reform'** report, released on 31 October 2018, showed India's rank in ease of doing business jump up from the 100th place among 190 countries. India had broken into the club of 100 nations easiest to conduct business in last year when it managed to jump 30 places from the 130th position.

What

1. India has been adjudged the fifth-best performing nation in reforming the business environment. The country improved its rankings in six of the 10 sub-categories used by the World Bank to judge business climate. It had delivered a similar performance last year.
2. India's ranking actually took a beating in two categories where landmark government reforms were expected to lead to better results.
3. In 'Paying Taxes', India actually saw its rank slip two notches to 121, despite the implementation of the Goods and Services Tax. The World Bank praised India for merging taxes and significantly revising the tax code, but it didn't lead to a better ranking.
4. The implementation of the Insolvency and Bankruptcy Code (IBC) could not save India from shedding five positions in 'Resolving insolvency', to 108. Estimates by the Department of Industrial Policy and Promotion (DIPP) suggest that creditors working through the IBC have realised almost 59 per cent of claims.
5. However, a recent report by Debtwire Asia has pointed out that on average, it took 275 days to approve a resolution plan from the time the corporate debtor was admitted under the Corporate Insolvency Resolution Process of the IBC. **The government's estimate is 233 days.**

S. No.	Indicator	2017	2018	Change
1	Construction Permits	181	52	+129
2	Trading Across Borders	146	80	+66
3	Starting a Business	156	137	+19
4	Getting Credit	29	22	+7
5	Getting Electricity	29	24	+5
6	Enforcing Contracts	164	163	+1
Overall rank		100	77	+23

Major jump

1. However, in 'Trading across borders', India surged 66 places to come in at the 80th spot. DIPP Officials attributed this to the implementation of a risk management system at ports that waives inspection requirement for 80 per cent of products.
2. The E-Sanchit mobile app makes e-payment of customs documents possible as well, as a number of major seaports that have been made operational 24x7 have been considered by the World Bank.
3. Among categories, the country had the best performance in 'Dealing with Construction Permits' where it jumped by a massive 129 places to become the 52nd easiest place to construct a business unit. Improved transparency and streamlined procedures were behind India cleaning up its notoriously corrupt land sector and the financial transactions that come with it.
4. The report, covering all policy reforms undertaken by the government till May 1 of this year, ranked India top among the South Asian nations.

5. There was an improvement in the country's 'ease of doing business score', which indicates the extent to which a country's regulatory practices are in sync with global best practices.
6. India also remained among the top-30 nations in the same three categories as last year — getting electricity, securing credit and protecting minority investors.
7. However, the World Bank noted that the country needed to do more in areas such as enforcing contracts, registering property and the most fundamental of them all -- ease of starting a business.
8. The latest report by the Washington DC-based multilateral agency encompasses 128 economies, implementing 314 specific business reforms over the past year. This surpassed the previous all-time high of 290 reforms two years ago.
9. India is among 11 major economies for which the World Bank took into account two specific metropolitan areas, in this case, Delhi and Mumbai.

Year	2014	2016	2017	2018
Overall rank	142	130	100	77
DTF	53.97	56.05	60.76	67.23

The important features

1. The World Bank has recognized India as one of the top improvers for the year.
2. This is the second consecutive year for which India has been recognized as

Ease of Doing Business: Where India stands now			
Doing Business 2018 Report (2017)*	Doing Business 2019 Report (2018)*	Movement in Rank	
India's Country Rank (Out of 190)	100	77	23
Dealing with construction permits	181	52	129
Trading Across Borders	146	80	66
Starting a business	156	137	19
Getting Credit	29	22	7
Getting Electricity	29	24	5
Enforcing Contracts	164	163	1
Paying Taxes	119	121	-2
Protecting Minority Investors	4	7	-3
Resolving Insolvency	103	108	-5
Registering Property	154	166	-12

*Note: \*Year in bracket represents the year report was launched; Green represents the best development in rank; Red represents the worst development in rank; Source: World Bank Doing Business 2019 Report*

one of the top improvers.

3. India is the first BRICS and South Asian country to be recognized as top improvers in consecutive years.
4. India has recorded the highest improvement in two years by any large country since 2011 in the Doing business assessment by improving its rank by 53 positions.

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

India secures highest rank in in South Asia...		... But not in the BRICS grouping	
Doing Business 2019 Report (2018)*	Doing Business 2019 Report (2018)*		
Bhutan	81	Brazil	109
India	77	Russian Federation	31
Nepal	110	India	77
Sri Lanka	100	China	46
Pakistan	136	South Africa	82
Bangladesh	176		
Afghanistan	167		
Note: Green represents best performing economy; Red represents worst performing economy; Source: Doing Business 2019 Report		Note: Green represents best performing economy; Red represents worst performing economy; Source: Doing Business 2019 Report	

#### Indicator wise highlights

1. Procedures reduced from 37 to 20 in Mumbai and from 24 to 16 in Delhi
2. Time reduced from 128.5 to 99 days in Mumbai and from 157.5 to 91 days in Delhi
3. Building quality control index improved from 12 to 14 in Mumbai and 11 to 14 in Delhi
4. Cost of obtaining construction permits reduced from 23.2 percent to 5.4 percent
5. DTF score improved from 38.80 to 73.81

#### Trading Across Borders

1. Robust Risk Management System has reduced inspections significantly
2. e-Sanchit allows traders to file all documents electronically
3. Time and cost to export reduced through the introduction of electronic self-sealing of container at the factory

#### Starting a Business -

1. Procedures reduced from 11 to 10 in Delhi and 12 to 10 in Mumbai
2. Time reduced from 30 to 16 days in Delhi and 29.5 to 17 days in Mumbai
3. PAN, TAN, DIN now merged with SPICe making it a single form for company incorporation
4. No requirement of inspection for registration under Shops & Establishment in Mumbai
5. Distance to Frontier (DTF) improved from 75.40 to 80.96

#### Access to Credit

1. Rank improved from 29 to 22
2. DTF improved from 75 to 80
3. Strength of legal rights index improved from 8 to 9
4. Secured creditors will now be repaid first during business liquidation hence given priority over other claims

#### Access to Electricity

1. Procedures reduced from 5 to 3 in Delhi and 5 to 4 in Mumbai
2. DTF improved from 85.21 to 89.15

## INDIA IN GCI 2018

India has been ranked as the 58th most competitive economy on the World Economic Forum's global competitiveness index (GCI) for 2018. India's rank rose by five places from 2017, the largest gain among G20 economies, the WEF said. On the list of 140 economies, the US is followed by Singapore and Germany at the second and the third positions respectively. India was ranked 58th with a score of 62.0 in the latest Global Competitiveness Report.

What

1. Neighbouring China was ranked at the 28th position in the overall list. **According to the report, the top performers in the "upper and lower middle-income brackets", such as China and India, are catching up with or even outperforming the average among high-income economies.**

2. China, is already more advanced when it comes to investing in research and development sub-pillar than the average high-income economy, while India is not far behind and let down only by its less-efficient bureaucracy for business creation and insolvency.

3. Among the BRICS economies, China topped the list at 28th place with a score of 72.6, ahead of the Russian Federation

(65.6, 43rd), India (62.0, 58th), South Africa (60.8, 67th), and Brazil (59.5, 72nd). **India, however, remained the "South Asia's main driving force."**

4. As per the report, India leads the region in all other areas of competitiveness except for health, education and skills, where Sri Lanka boasts the highest healthy life expectancy (67.8 years) and the workforce with the highest amount of schooling (9.8 years).
5. These two countries (India and Sri Lanka) are also the ones that can rely on the most efficient infrastructure system. India has invested more heavily on transport infrastructure and services, while Sri Lanka has the most modern utility infrastructure.
6. As per the report, **India's greatest competitive advantages include its market size, innovation** (in particular the quality of its research establishments and business dynamism (including the number of disruptive businesses).
7. While the areas that the country needs to improve include, labour market (in particular workers rights), product market (in particular trade tariffs) and skills (in particular pupil-teacher ratio).
8. Other countries in the top 10 include, Switzerland (4th), Japan (5th), Netherlands (6th), Hong Kong (7th), United Kingdom (8th), Sweden (9th) and Denmark (10th).
9. **The World Economic Forum's Global Competitiveness Index 4.0 is a composite indicator that assesses the set of factors that determine an economy's level of productivity - widely considered as the most important determinant of long-term growth.**



10. The GCI 4.0 framework is built around 12 main drivers of productivity -- Institutions, Infrastructure; Technological readiness; Macroeconomic context; Health; Education and skills; Product market; Labour market; Financial system; Market size; Business dynamism; and Innovation.

### **‘STATUE OF UNITY’ DEDICATES TO NATION**

Prime Minister Narendra Modi on 31 October 2018 dedicated to the nation a 182-metre statue of Sardar Vallabhbhai Patel, believed to be the tallest in the world, and said it will be a reminder about the courage of a man who thwarted efforts to disintegrate India.

What

1. The Statue of Unity, designed by Padma Bhushan sculptor Ram Suthar, depicts Sardar Vallabhbhai Patel, India's first Home Minister and architect of united India, wearing a traditional dhoti and shawl, facing Sardar Sarovar Dam on Narmada River.
2. Standing tall at 182 meters, this is the tallest Statue in the world.
3. The base of the Statue stands above the highest flood level recorded over a 100-year period, 237.35 m above sea level.
4. It can withstand wind speed of upto 200 kmph, and earthquakes measuring 6.5 on Richter scale at a depth of 10 km and within a radius of 12 km of the Statue.
5. Foundation stone was laid in October 2013 by then Gujarat Chief Minister Narendra Modi, now Prime Minister.
6. Built in 33 months by Larsen & Toubro Limited (L&T) using over 70,000 tonnes of cement, 24,000 tonnes of steel and about 1,700 tonnes of bronze. Total 250 engineers and 3,700 workers were engaged in the construction.
7. Statue's surface (skin) has 553 bronze panels - each panel has 10-15 micro panels - made at a Chinese foundry, as there was no facility available in India to make panels of this scale.
8. Total project cost Rs 2,989 crore (US\$ 407 million), mostly funded by State and Central government through Sardar Vallabhbhai Patel Rashtriya Ekta Trust (SVPRET).
9. L&T to maintain and handle operations of the structure for 25 years.
10. Metal scrap (mainly agriculture equipment scrap) was collected from the 6 lakh villages under the 'Loha Campaign' from across the country.
11. Developed on the banks of River Narmada on Sadhu Bet - 3.2 km downstream of Sardar Sarovar Dam, visitors can have a view of 200 km of the Dam and the Satpura and Vindhya Mountain ranges from a viewing platform at **the level of the statue's chest.**
12. The Statue has two high-capacity elevators with speed of 4 meters per second to reach the viewing platform at 153 meter.
13. **Inaugurated by Prime Minister Narendra Modi on Patel's 143rd birth anniversary** on October 31, 2018, it will open for public from November 1.
14. The Statue has 17 km-long Valley of Flowers having 100 varieties of flowers. Selfie Points in 5-km radius around the Statue is also constructed.
15. An army of 100 cleaners will be deployed to keep the premises clean and about 80 trained tourist guides.

### **BIHAR'S SHAHI LITCHI GETS GI TAG**

Shahi Litchi from Bihar has received Geographical Indication (GI) tag from Chennai based Geographical Indication Registry and Intellectual Property India. The GI registration was done in name of Muzaffarpur-based Litchi Growers Association of Bihar, which had applied for the tag. Shahi Litchi which famous for its sweet, juicy, unique flavour and aroma is mostly grown in Muzaffarpur and adjoining areas of East

Champanan, Vaishali, Samastipur and Begusarai districts of state. Bihar produces 40% of the litchis grown in India on 38% of the area.

What

1. The GI tag for Shahi Litchi will improve demand for fruit and reduce fear of fake and poor quality litchis.
2. It will also help and benefit thousands of litchi growers who will gain access to more markets and get better price for their produce in the country and abroad.

#### Geographical Indication (GI)

1. GI tag is name or sign used on certain products which correspond to specific geographical location or origin.
  2. It is used for agricultural, natural and manufactured goods having special quality and established reputation.
  3. The goods and products having tag are recognised for their origin, quality and reputation and gives it required edge in global market.
  4. It also ensures that none can use their name, giving them exclusivity.
  5. The registration of GI is valid for 10 years after which it needs to be renewed.
  6. GI is covered as element of intellectual property rights (IPRs) under Paris Convention for Protection of Industrial Property.
  7. At international level, **GI is governed by WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)**.
  8. In India, GI tag Geographical Indications of Goods (Registration and Protection Act), 1999 governs it.
  9. This Act is administered by Controller General of Patents, Designs and Trade Marks, who is also Registrar of Geographical Indications and is based in Chennai, Tamil Nadu.
3. Shahi Litchi is fourth agricultural product from Bihar after Katrani rice, Jardalu mango and Magahi paan (betel vine) to get GI tag.
  4. In addition to four GI tags in agricultural field, some art form from Bihar such as Madhubani painting, applique – Khatwa patch work, Sikki grass work, Sujini embroidery work and Bhagalpur silk have also been accorded GI tag under handicraft category.

#### NIF ON SDG APPROVED

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the constitution of a High Level Steering Committee for periodically reviewing and refining the National Indicator Framework (NIF) for monitoring of Sustainable Development Goals (SDGs) with associated targets. The High Level Steering Committee will be chaired by Chief Statistician of India and Secretary, Ministry of Statistics and Programme Implementation (MoSPI), with the Secretaries of data source Ministries and NITI Aayog as members and Secretaries of other related Ministries as special invitees, with function of reviewing of National Indicator Framework including refinement of the indicators from time to time.

Targets

1. Measures to mainstream SDGs into on-going national policies, programmes and strategic action plans to address the developmental challenges.
2. Statistical indicators of NIF will be the backbone of monitoring of SDGs at the national and state level and will scientifically measure the outcomes of the policies to achieve the targets under different SDGs.
3. Based on statistical indicator, the MoSPI will bring out national reports on implementation of SDGs. The Report will facilitate assessment of progress, identify challenges and give recommendations for follow up at the national level.
4. High Level Steering Committee will review the National Indicator Framework on regular basis for its improvement.

5. Data source Ministries / Departments will be responsible for providing regular information to MoSPI on these indicators at required intervals and disaggregation for national and sub-national reporting of SDGs.
6. Advanced IT tools will be used for close and effective monitoring.

#### Major impact

1. SDGs integrate economic, social and environmental dimensions of development. It intends eradicating poverty and promoting prosperity in a changing world with basic motto of 'SabkaSaathSabkaVikash'.
2. SDGs with 17 Goals and 169 Targets intend for promotion of sustainable, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, promoting integrated and sustainable management of natural resources and ecosystems.
3. NIF will help in outcome-based monitoring & reporting on progress on SDGs at National level.
4. There is no direct financial implication on implementation of the National Indicator Framework. However, the respective Ministries will need to re-align and strengthen their data systems to facilitate monitoring of the SDG indicators.
5. SDGs are expected to bring change in the lives of people and the monitoring of progress of implementation of SDGs will benefit the entire nation.

#### Background

1. At the Millennium Summit held in 2000 at the UN Headquarters in New York, eight development goals known as the 'Millennium Development Goals' (MDGs) were adopted, which formed the blueprint for countries to pursue their national development strategies from 2000 to 2015.
2. The MDGs comprised eight Goals and addressed various development issues. The MDGs targets were unevenly achieved across the countries and a need was felt to start fresh discussions to assess the usefulness of the MDGs and to explore possible successor to guide development cooperation in the world beyond 2015.
3. The UN General Assembly in its 70th Session considered and adopted the Sustainable Development Goals (SDGs) for the next 15 years.
4. The 17 SDGs came into force with effect from 1st January, 2016. Though not legally binding; the SDGs have become de facto international obligations and have potential to reorient domestic spending priorities of the countries during the next fifteen years. Countries are expected to take ownership and establish a national framework for achieving these Goals.
5. Implementation and success will rely on countries own sustainable development policies, plans and programmes.
6. Countries would be responsible for follow-up and review at the national level, with regard to the progress made in implementing the Goals and targets.
7. Actions at the national level to monitor progress under SDGs will require quality, accessible and timely data.

## INDIA'S FIRST RAILWAY STATION INSIDE TUNNEL

For the first time in India, a railway station will be built inside a tunnel at a height of 3,000 metres, on the strategic Bilaspur-Manali-Leh line close to the China-India border. While many metro stations in Delhi and other cities are inside tunnels, once completed, the Keylong station in Himachal Pradesh will be the first on the railway network to be inside a tunnel. Keylong is the administrative centre of Lahaul and Spiti district, 26 km north of Manali and 120 km from the India-Tibet border.

#### What

1. The Keylong station, in the project, will be inside the tunnel according to the first phase of the location survey.

2. This will be the first such railway station in the country. As and when the final surveys are completed, there could be many such stations on the route.
3. The station will be at a height of around 3,000 metres and will be inside a 27-km-long tunnel.
4. The line once completed will connect all important locations between Bilaspur and Leh like Sundernagar, Mandi, Manali, Keylong, Koksar, Darcha, Upshi and Karu and other towns of Himachal Pradesh and Jammu and Kashmir.
5. It is important because of its proximity to the China-India border and can facilitate in movement of goods and personnel to the frontier areas.
6. The project will include 74 tunnels, 124 major bridges and 396 minor bridges, according to the first phase of the survey.
7. The final location survey is expected to be completed in 30 months, after which a detailed project report will be finalised.

## PPP GUIDELINES FOR DISTRICT HOSPITALS

The central government laid down guidelines for facilitating the entry of private sector in the healthcare space at the district-level, through the Public Private Partnership (PPP) models on 17 October 2018. Public think-tank Niti Aayog, along with technical assistance from the World Bank, has charted out guidelines for PPP that states can choose to opt for, as health is a state subject.

Different models

1. Four PPP models—Management of Contract, Purchasing of Services, Build, Operate and Transfer Model or a Co-location Model—have been proposed.
2. In the Management of Contract model, the state government will bring in a private partner for a period of 10-15 years of investing in equipping the government facility, hiring human resources and managing the facility, while government will reimburse the private partner.
3. In the Purchasing of Services model, the state government will identify medical and surgical procedures that a private partner, whom they empanel, will carry out and the government will pay or co-pay the costs. This will be for a period of one to three years.
4. In the Build, Operate and Transfer Model, the private partner will have the vacant land offered by the government for thirty years or more and will finance the project. The government will allow patients to be charged by the **private facility, termed as ‘User Fee’**.
5. The Co-location model will involve government allowing a private partner to set-up a separate facility through private investment within an existing

### Access to services

1. The dearth of CT scan and MRI services has already lead to a boom of PPP projects for making radiology services available in government-run hospitals at subsidised rates.
2. For example, Wipro GE Healthcare Pvt. Ltd. already runs 200 centres across the country in government hospitals. The question however is if a poor person can afford to pay subsidised rates for his/her scans.
3. To charge a user fee or not is up to the state. For example, in Assam, under the free diagnosis programme poor persons are not charged any fee for diagnosis.
4. Kerala which is ahead of other states when it comes to healthcare delivery has started Cath Labs in select block-level hospitals, where Wipro GE Healthcare Pvt. Ltd is the equipment provider. Kerala has not opted for PPP. Theirs is a direct procurement model, where they procure equipment from us and run it with the government manpower. Each state has their individual preferences.

government hospital premise for duration of 15 years with a renewal option and it will allow the private facility to charge patients.

6. The decision to create Model Concessionaire agreements (MCA) for PPP in health sector was taken in March 2016 by Prime Minister Narendra Modi.
7. The centre of the MCAs are the district hospitals and the focus is on preventing, diagnosing and treating Non-Communicable Diseases (NCDs) like heart and lung diseases and cancer in Tier II and III cities.

## ADJUDICATING AUTHORITY FOR BENAMI CASES

The government on 24 October 2018 approved setting up of Appellate Tribunal and Adjudicating Authority for speedy disposal of causes related to benami transactions. The decision was taken during a meeting of the Union Cabinet chaired by Prime Minister Narendra Modi, law minister Ravi Shankar Prasad said. Earlier this month, **the government notified session's courts in 34 states and Union Territories**, which will act as special courts for trial of offences under the benami transaction law.

What

1. Benami transactions refer to those made in fictitious names or where owners were not aware of the ownership of the property, or the person paying for the property was not traceable.
2. The Adjudicating Authority and Appellate Tribunal will be based in the National Capital Territory of Delhi (NCTD).
3. Benches of the Authority may sit in Kolkata, Mumbai and Chennai, and the necessary notification in this regard will be issued after consultation with the chairperson of the proposed Adjudicating Authority.
4. The approval will result in effective and better administration of cases referred to the Adjudicating Authority and speedy disposal of appeals filed against the order of the Adjudicating Authority before the Appellate Tribunal.
5. The appointment of the Adjudicating Authority, it added, would provide the first-stage review of administrative action under the Prohibition of Benami Property Transactions Act (PBPT) Act.
6. Establishment of the proposed Appellate Tribunal would provide an appellate mechanism for the order passed by the Adjudicating Authority under the PBPT Act.
7. The rules and all the provisions of the Benami Transactions (Prohibition) Act came into force on November 1, 2016.
8. After coming into effect, the existing Benami Transactions (Prohibition) Act, 1988, was renamed as the Prohibition of Benami Property Transactions Act, 1988.

## FIRST EVER WHO'S GLOBAL MEET TO TACKLE POLLUTION

Alarmed at the rising levels of pollution causing growing burden of diseases and deaths, the World Health Organisation (WHO) has called health and environment ministers of all countries including India, global leaders and experts from academia and scientific community for the first time to devise a strategy to combat pollution and its impact on health. The high-level three-day meeting, slated from October 30 to November 1 in Geneva, is likely to determine ambitious targets for countries, mainly those where morbidity and mortality is higher. India may have to face flak at the global stage with the further dipping of air quality in Delhi and northern region this weekend.

What

1. The timing is such that India is likely to face increased criticism as pollution levels are going to increase with stubble fires in Haryana and Punjab as farmers get ready to sow winter crops and a possible firecracker spurt on Diwali.
2. Latest estimates from the UN agency show that of the 20 most polluted cities in the world, the top 14 are in India. While Kanpur, Faridabad and Varanasi were among the top three, others in the list include Delhi, Patna, Agra, Muzaffarpur, Srinagar, Gurgaon, Jaipur, Patiala and Jodhpur, followed by Ali Subah Al-Salem in Kuwait and a few cities in China and Mongolia.

3. Outdoor air pollution accounted for over 10.87 lakh deaths in India in 2016, whereas household air pollution led to over 10.85 lakh deaths.
4. The agenda drawn by WHO for the meeting insists that affordable strategies exist to reduce key pollution emissions from the transport, energy, agriculture, waste and housing sectors and countries must adopt health-conscious strategies to reduce climate change and support sustainable development goals for health, energy and cities.

## GOM SET UP TO LOOK INTO SEXUAL HARASSMENT

A Group of Ministers, headed by Home Minister Rajnath Singh, has been constituted by the government to strengthen the legal and institutional frameworks to deal with and prevent sexual harassment at workplace. The members of the GoM are Road Transport Minister Nitin Gadkari, Defence Minister Nirmala Sitharaman and Women and Child Development Minister Maneka Gandhi, a home ministry official said.

What

1. The GoM will examine the existing legal and institutional frameworks for dealing with matters of sexual harassment of women at workplace.
2. It will recommend action required for effective implementation of the existing provisions, as well as for strengthening the existing legal and institutional frameworks for addressing issues related to sexual harassment at workplace.
3. The GoM has been set up in the wake of #MeToo movement where several women have publicly named people who had harassed them at their workplace.
4. Former editor M J Akbar had to resign as Minister of State for External Affairs following allegations of sexual harassment against him by former colleagues.

## FIRST INDIGENOUSLY SUKHOI-30 MKI

In an important development for the fighter aircraft squadrons of the country, the first indigenously overhauled Sukhoi-30 MKI frontline fighter jet was handed over by the Base Repair Depot (BRD) in Ojhar to the Indian Air Force. It will be deployed with the Air Force base in Pune.

What

1. The fighter jet will be deployed at the IAF base at Lohegaon in Pune, which is home to two squadrons of the Sukhoi 30 — **the '20 Squadron', also known as 'Lightnings', and '30 Squadron', also known as 'Rhinos.'**
2. The overhauled aircraft is nothing less than a new one, which means its life span, is increased. This particular jet will be deployed in Pune, which is one of the important operational bases of the IAF.
3. Sukhoi-30 has been developed by Russia and is manufactured under license in India by the Hindustan Aeronautics Limited (HAL) in Ojhar.
4. Earlier, this particular overhauled Sukhoi-30 MKI successfully took its first sortie on April 24 and was being flight tested for its air-worthiness, before being inducting for operational tasks at the flying squadron.
5. The BRD in Ojhar is the only fighter aircraft repair depot of the IAF. It undertakes repair and overhaul of frontline fighters such as MIG-29 and Sukhoi 30 MKI.
6. **It was established in April 1974 and was subsequently renamed as '11 Base Repair Depot'.**
7. The depot has built up on expertise and infrastructure over the years and by 1983, it had overhauled 100 Sukhoi-7 aircraft.
8. From 1983 to 1988, it undertook overhaul of MIG-21 and 28 aircraft. Later, overhaul facility for MIG-23 aircraft was set up in 1986 and 248 aircraft were overhauled till May 2015.
9. At present, the upgradation of MIG-29 and Repair and Overhaul (ROH) at Sukhoi-30 MKI aircraft is being undertaken at the depot. In addition, 11 BRD

is the only agency to undertake overhaul of ejection seats and role equipment of Sukhoi-30 MKI aircraft.

## SUSTAINABLE SANITATION KICKED OFF

The Ministry of Drinking Water and Sanitation, Government of India, in coordination with the Water Supply and Sanitation Department, Government of Maharashtra, organized the first in a series of regional review meetings on Sustainable Sanitation on 27 October 2018. The regional review was held in Nagpur, attended by State Secretaries in-charge of rural sanitation, Mission Directors, and other State Swachh Bharat Mission (SBM) officials, including representatives from 25 districts from Maharashtra, Madhya Pradesh, Chhattisgarh and Gujarat.

What

1. Quality and sustainability are a parallel focus in the Swachh Bharat Mission implementation mechanism, especially now that a majority of districts across the country have achieved Open Defecation Free (ODF) status.
2. Aimed at a more focused drive on the theme of sustainability, and improving quality of, the work done on the ground, the review meeting covered a range of quality and sustainability indicators in order to improve infrastructure and data quality and to improve communication for quality initiatives.
3. The Swachh Bharat Mission enters its fifth and final year of implementation; this year is a clear milestone for the janandolan to move ahead with a new target to ensure the cleanliness of the country.
4. The States also made presentations on their status of sustainability indicators, such as geotagging, ODF verifications, Information, Education, and Communication (IEC) activities, etc., followed by discussions on how to move forward.
5. The regional meeting follows the official kick-start of the workshop in New Delhi on 24th October 2018, where the Ministry of Drinking Water and Sanitation interacted with State SBM officials to review and communicate the various message of the Quality and Sustainability Mission.
6. The series of sustainability regional workshops which will take place across the country have been scheduled within the next month to cover all States and Union Territories. Current locations include Chennai (Tamil Nadu), Nainital (Uttarakhand), Guwahati (Assam) and Kolkata (West Bengal).
7. As of October 2018, rural sanitation coverage has increased from 39%, at the launch of the SBM in 2014, to 95%. With rural India having constructed 8.7 crore individual household toilets, 5.15 lakh villages, 530 districts and 25 States and Union Territories have been declared ODF.

## INDIA'S FIRST INLAND WATERWAYS SHIPMENT

The country's first container movement on inland waterways vessel post-independence scheduled on 29 October 2018 from Kolkata would start with a consignment of the PepsiCo. Inland Waterways Authority of India (IWAI) officials said the food and Beverage giant would move 16 containers from Kolkata to Varanasi

### Flashback

1. Inland Waterways Authority of India (IWAI) was created by Government of India on 27 October 1986 for development and regulation of Inland waterways for shipping and navigation.
2. The Authority primarily undertakes projects for development and maintenance of Inland Waterway Terminal infrastructure on National Waterways through grant received from Ministry of Shipping, Road Transport and Highways.
3. The head office is at Noida. The Authority also has its regional offices at Patna, Kolkata, Guwahati and Kochi and sub-offices at Allahabad, Varanasi, Bhagalpur, Farrakka and Kollam.

on NW-1. PepsiCo (India) will move 16 containers equivalent to 16 truckloads - filled with food and snacks in the vessel MV RN Tagore which will reach Varanasi in 9-10 days.

What

1. The vessel will make its return journey with fertilizers belonging to IFFCO that will be procured from its Phulpur plant near Allahabad.
2. The government is developing NW-1 (River Ganga) under the Jal Marg Vikas Project (JMVP) from Haldia to Varanasi covering a distance of 1390 km with technical and financial assistance of the World Bank at an estimated cost of Rs 53.69 billion.
3. The project would enable commercial navigation of vessels with capacity of 1500-2,000 DWT.

## INS TARANGINI RETURNS

The sail training ship of Indian Navy, INS Tarangini based at Kochi, returned after a seven month long sailing across the world to a grand reception at naval base, Kochi on 30 Oct 18. The ship was received by Rear Admiral RJ Nadkarni, VSM, Chief of Staff, Southern Naval Command. A welcoming ceremony was conducted by the Southern Naval Command at South Jetty of the naval base to mark the occasion. The Voyage named **“Lokayan 18” was flagged off on 10 Apr 18 from Kochi.**

What

1. During the voyage, the ship has proudly 'shown the flag' and highlighted the diverse culture of India across 15 ports in 13 countries.
2. The ship sailed across the Arabian Sea, Red Sea, Suez Canal, Mediterranean Sea, Strait of Gibraltar, North Atlantic Ocean, Bay of Biscay, English Channel and North Sea, right up to Norway before commencing her homeward passage back to Kochi.
3. The ship also participated in the culminating event of the 'Three Festival Tall Ships Regatta' at Bordeaux, France. As well as the 'Tall Ships Races Europe 2018' which started at Sunderland, UK and touched Esbjerg, Denmark and Stavanger, Norway before finishing at Harlingen, Netherlands.
4. During the tall ships regatta, the ship sailed along with hundreds of other sailing vessels, of which 200 were 'Tall Ships' like herself, besides taking part in the parade of sails, which was conducted at all these ports.
5. INS Tarangini is a three masted 'square rigged' barque which carries a total of 20 sails. She is the First Sail Training Ship in Indian Navy and was commissioned on 11 Nov 1997.
6. In her 21 years of glorious service, she has sailed over 2,20,000 nautical miles to date across the world's oceans. The ship is under the command of Cdr Rahul Mehta. She has a crew of nine officers and 43 sailors and can also embark 30 Officer Sea Trainees.
7. She is the first of two Sail Training Ships in the First Training Squadron, the other being INS Sudarshini. The primary role of these Sail Training Ships is to develop character and professionalism, as well as inculcate the qualities of initiative, courage, resilience and esprit-de-corps amongst the Sea Trainees and also impart practical training to them, primarily on navigation, sailing and seamanship.
8. Over the years, INS Tarangini has been extensively deployed for long voyages away from her base port of Kochi, which includes one circumnavigation of the globe (2003-04) and three **previous 'Lokayans' (2005, 2007 and 2015).**

## INDIA'S FIRST JUSTICE CITY

Andhra Pradesh is building a world-class and India's first 'Justice City' within its new capital Amaravati with the vision to provide a state-of-the-art ecosystem built on latest technology for supporting the judicial system in the state. Andhra Pradesh Chief Minister N. Chandrababu Naidu has taken up this task upon himself to ensure that state-

of-the-art complexes and facilities are developed which are needed to support quick and efficient court system.

What

1. Once the Justice City is ready, Amaravati will be the first city in India to be home to the nation's first dedicated city on Justice, Andhra Pradesh Capital Region Development Authority (APCRDA) said. APCRDA is the nodal agency which is developing Amaravati.
2. Justice City in Amaravati which will comprise integrated judicial hub spread across 3,309 acres with an estimated population of 2.5 lacs. The Justice City is expected to generate employment for more than 1.3 lac people.
3. A symbol of sustainable and inclusive growth, the capital city of Amaravati under the leadership of Chief Minister Chandrababu Naidu is poised to become a world-class city to fulfill the aspirations and motivations of the people of the state.
4. There is a big opportunity that lies in the Justice city for legal firms and offices, law institutes and colleges, resource centres, legal process outsourcing unites, legal think-tanks and research centres, NGOs, as well as for the para legal and allied industries.
5. According to Centre for Strategy and Leadership's Chief Executive and Director Vikas Sharma: "Andhra Pradesh has always been a forward-looking state. It has set-up a legal services committee to provide free and competent legal services to the needy.
6. It is also among the first in the country to set up an integrated criminal justice system for faster and better prosecution of legal cases. Now, the state is breaking new ground by building an entire city with Justice at its core.

#### About Centre for Strategy and Leadership (CSL)

1. Centre for Strategy and Leadership (CSL) is a special initiative focused on Sustainable Social and Economic Development of people of India.
2. CSL believes in developing synergies through close cooperation and collaboration of key stakeholder partners in Government, Public and Private Enterprises, and, Citizen Groups.
3. CSL is registered under Section 8 of the Companies Act, 2013 and works with its partners to drive Sustainable Social and Economic Development by conducting research and carrying out specialised programmes and initiatives.

## INDIA RANKING IN GPI

The Indian passport was ranked 66th in the world in the latest ranking of the Global Passport Index (GPI). The ranking was based on the **passports' visa-free** score. The ranking of Indian passport, granting its holders visa-free access to 66 countries, improved nine notches since the previous year. As per the annual passport index, **Singapore and Germany have the world's "most powerful" passport** with access to 165 countries.

What

1. Falling in the last place of the list is Afghanistan, ranked 91 with a score of 22, followed by Pakistan and Iraq at 90 with a score of 26, Syria at 88, having a score of 29 and Somalia at 87 with a score 34.
2. The results are part of citizenship planning firm **Henley and Partners' annual passport index**, which ranks passports based on the number of countries a holder can go to without a visa or the number of countries a holder can go to where they can obtain a visa, **visitor's permit**, or electronic travel authority upon arrival.
3. Passport Index has become the most popular interactive online tool to **display, sort and rank the world's passports**.

4. The index ranks national passports by the cross-border access they bring, **assigning a “visa-free score” according to the number of countries a passport holder can visit visa-free or with visa on arrival.**

## INTERNATIONAL

### INDIA TO HOST UNICEF’S GLOBAL MEET

**India will be the global host of UNICEF’s Partnership for Maternal, Newborn and Child Health stakeholders meeting**, including participation from nearly hundred countries, this December. The Partnership for Maternal, Newborn and Child Health Forum will emphasise the importance of people-centred accountability, bringing forward the voices and lived realities of women, children and adolescents through innovative programming and creative projects.

What

1. The Forum will be hosted by Ministry of Health and Family Welfare in collaboration with the Partnership for Maternal, Newborn and Child Health (PMNCH) this December.
2. The UNICEF said Prime Minister Narendra Modi, former Chile President Michelle Bachelet and the chair of PMNCH would deliver the keynote addresses.
3. India has performed better than rest of the world in this field and the number of children dying under-five years has fallen by 30 per cent since 2012, from 1.4 million to 989,000.
4. According to a new report by the United Nations Inter-agency Group for Child Mortality Estimation (UN IGME), under-five mortality rate in India was recorded below one million in 2017 for the first time in five years.
5. The Forum will be held on December 12 and 13 at Vigyan Bhawan, will see participation from heads of states, ministers, popular champions, and 1,200 partners from nearly 100 countries.
6. India will get an opportunity to present its success story in improving the maternal and child health (indicators) at a world stage. Moreover, the forum would also bring various stakeholders on a common stage to share their ideas.
7. This is the second time India is hosting the forum after 2010. The previous chapters of the Forum have been held at Johannesburg in South Africa in 2014 and Dar es Salaam in Tanzania in 2007.

### MULTILATERAL AIR ENCOUNTER CODE

Several countries including the United States and China agreed "in principle" on 20 October 2018 to multilateral guidelines to manage unexpected encounters between their military aircraft, joining 10 Southeast Asian nations already in the pact.

What

1. The world's two biggest economies as well as Australia, India, Japan, New Zealand, Russia, South Korea tentatively joined the agreement, which was initially adopted by the Association of Southeast Asian Nations (ASEAN), according to a joint statement issued after a meeting of defence ministers from the 18 countries in Singapore.
2. The voluntary, non-binding guidelines build on an existing code to manage sea encounters was adopted by all 18 countries last year, which was designed to mitigate risks following a boom in the region's maritime and air traffic in recent years.
3. The air code has been hailed as the first multilateral deal of its kind, although such arrangements exist at bilateral levels.
4. The US and China, for instance, in 2015 signed a pact on a military hotline and rules governing air-to-air encounters.

5. US defense secretary Jim Mattis told his Chinese counterpart, Wei Fenghe, that their countries needed to deepen high-level ties so as to navigate tension and rein in the risk of inadvertent conflict.
6. The US military flew B-52 bombers across the South China Sea in September. Earlier this month, a US Navy destroyer sailed near islands China claims, drawing the ire of Beijing.

#### FIRST INDUSTRIALISED NATION TO LEGALISE CANNABIS

Canada became the first industrialized nation to legalise recreational cannabis on 17 October 2018, but a lawful buzz will be hard to come by in its biggest cities like Toronto and Vancouver, which will have no stores open. Weed enthusiasts in Newfoundland and Labrador, **Canada's easternmost province, kicked off the first permissible sales at midnight. Over 100 people braved the cold and wind in the province's capital St. John's, lining up outside a Tweed-branded store owned by Canopy Growth Corp., the world's most recognized cannabis producer.**

What

1. Canada is now the second country in the world to legalize the sale of recreational marijuana, right behind Uruguay.
2. Newfoundland and Labrador was the first province to sell legal pot, with customers lining up.
3. Other countries around the world, many of whom are just approving medical **marijuana, are watching Canada's recreational legalization, which combines federal rules with varying provincial regulations.**
4. The move is a political win for Canadian Prime Minister Justin Trudeau, who vowed to legalise cannabis in his 2015 election campaign.
5. That pledge was aimed at taking profits away from organized crime and regulating the production, distribution and consumption of a product that millions of Canadians had been consuming illegally.
6. But provinces and businesses have struggled to prepare, and legalization was pushed back from original expectations of a July start to enable setting up distribution and sales networks.
7. British Columbia, which plans both province-run and private outlets, has only one government store 350 kilometres (220 miles) from its biggest city, Vancouver. Private store licenses will only be issued after legalization.

#### INDIA, CHINA INK SECURITY PACT

As India and China signed the first comprehensive security cooperation agreement, New Delhi raised the issue of China blocking designation of Jaish-e-Mohammad (JeM) chief Maulana Masood Azhar as a terrorist before a United Nations sanctions committee with the Chinese delegation. Union Home Minister Rajnath Singh signed an agreement on security cooperation with Zhao Kezhi, minister of Public Security of **People's Republic of China. China has twice blocked India's efforts to include Azhar into the UN list.**

What

1. Kezhi is on a bilateral visit to India from October 21 to 25, during which he **will also travel to Mumbai. "During the meeting, the two sides discussed issues of mutual interest, including bilateral counter-terrorism cooperation, and welcomed increased cooperation between India and China in the area of security cooperation.**
2. An Agreement on Security Cooperation between the Ministry of Home Affairs of India and the Ministry of Public Security of China was also signed by the two Ministers.
3. **India's NIA and NCB will have agency to agency cooperation** to strengthen high-level agreement and cooperation.
4. The officials said a Memorandum of Understanding was signed in 2005 with China but it lapsed two years ago.

5. The renewed treaty between the countries, officials said, will help New Delhi nab top ULFA leader Paresh Barua, who is believed to be taking refuge in the trijunction between India, China and Myanmar.
6. India will also raise the practice of China issuing stapled visas to people belonging to Arunachal Pradesh and Jammu and Kashmir, said officials.

## MOU AMONGST BRICS APPROVED

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has given its ex-post facto approval for the Memorandum of Understanding (MoU) among Brazil, Russian Federation, India, China, South Africa, regarding Cooperation in the Social and Labour Sphere. The MoU was signed on 3rd August, 2018 during BRICS Labour and Employment Ministers (LEM) Meeting.

### What

1. In the MoU, the parties including India have agreed to cooperate and hold mutual events in the prominent areas viz. labour legislation and enforcement, protection of workers' rights with focus on vulnerable groups, Employment and labour market policies, Professional education, skills and training and Social protection.
2. The member countries may utilize the BRICS Network of Labour Research Institutes and BRICS Social Security Cooperation Framework for cooperation on Social Security and other labour issues.
3. The Memorandum is not an International Treaty and does not create rights and obligations for the parties governed by international law.

### Major Impact

1. The MoU provides a mechanism for cooperation, collaboration and maximum synergy amongst BRICS member countries with the common objective of inclusive growth and shared prosperity in the new industrial revolution.
2. This would facilitate member countries to share knowledge and also implement joint programmes on matter of Labour and Employment, Social Security and Social dialogue.
3. This would also ensure networking of international Training Centre of International Labour Organisation (ILO) with the BRICS Network of Labour Institutes which includes V.V. Giri National Labour Institute of India.
4. This network would specifically focus on the theme of youth employment and research on new forms of employment. This network will also explore new learning technologies, including virtual network to deepen cooperation, exchange of information and capacity building.

### Background

1. The 2nd meeting of BRICS Employment Working Group was held on 30th July to 1st August 2018 and BRICS Labour and Employment Ministerial meeting took place from 2nd August, 2018 to 3rd August, 2018 under the South African Presidency in Durban, South Africa.
2. The Draft MoU between BRICS countries regarding cooperation in the social and labour sphere was discussed, deliberated and finalized in the BRICS EWG meeting held between 30th July and 1st August 2018 and was signed by respective labour Ministers of BRICS member countries on 3rd August 2018.
3. The provisions of the MoU clearly indicate its objectives as cooperation in the nature of successful sharing of policy measures; exchange programmes; consultations; expert meetings and conference etc. in the social and labour sphere.

5. The BRICS Social Security cooperation framework will deepen social security cooperation among BRICS nations and would facilitate cooperation for improvement of social security systems and social security agreements among member countries.

## NATO'S BIGGEST PEACETIME DRILL KICKS OFF

**NATO's biggest** military manoeuvres since the Cold War kicked off on 25 October 2018 in Norway in a hypothetical scenario that involves restoring the **Scandinavian country's sovereignty after an attack by a "fictitious aggressor."** Russia, which shares a border with Norway, was briefed by NATO on the Trident Juncture 2018 drill and invited to monitor it, but Moscow is still angered by the exercise. Russia's defense minister had warned that Moscow could be forced to respond to increased NATO activity close to its western border.

What

1. **NATO's military activities** near our borders have reached the highest level since the Cold War times, Russian Defense Minister Sergei Shoigu said, noting that the **war games will be "simulating offensive military action."**
2. The wargames bring together around 50,000 personnel from all 29 NATO allies, plus partners Finland and Sweden. Around 65 vessels, 150 aircraft and 10,000 vehicles will participate.
3. The drill scheduled to end Nov. 7 takes place in central and eastern Norway, the North Atlantic and the Baltic Sea. Its aim is to ensure that NATO forces are trained, able to operate together and ready to respond to any threat from any direction, according to the 29-member alliance.
4. Cyber-attacks and disinformation are actively used to create divisions between people in Europe as well as in the United States, which in turn challenges democratic institutions and our ability to reach common conclusions.
5. Tensions in the region have grown between Baltic NATO members and Moscow, including reports of airspace violations by Russian military aircraft.
6. Non-aligned Sweden and Finland have watched with increasing trepidation, stepping up their own military activity with cross-border exercises and drills with NATO countries.

## WORLD'S LARGEST AMPHIBIOUS PLANE

China's indigenously designed and built amphibious aircraft AG600, touted as the world's largest, successfully carried out its first take-off and landing tests on 20 October 2018. The aircraft, developed and built by the state-owned aircraft firm Aviation Industry Corporation of China, took off and later landed on the water in Hubei province's Jingmen.

What

1. The seaplane took off from the Zhanghe Reservoir and stayed airborne for about 15 minutes which also accompanied the videos of the aircraft's take off.
2. The aircraft code-named Kunlong was piloted by four crew members.
3. Early this month, it completed its first water taxiing trials at a high speed of 145 kilometres.
4. Designed to be the world's largest amphibious aircraft, AG600 is powered by four domestically-built turboprop engines and has a range of 12 hours.
5. It will be mainly used for maritime rescue, fighting forest fires and marine monitoring, according to an earlier report.
6. The aircraft has passed a series of tests since its maiden flight last December. It successfully finished eight taxiing tests on water at a speed of 80-kilometre per hour and 120-kilometre per hour.

## CHINA TO LAUNCH ARTIFICIAL MOON

**China is planning to launch its own ‘artificial moon’ by 2020** to replace streetlamps and reduce electricity costs in urban areas of the country. ‘Illumination satellites’ are being developed in Chengdu, a city in southwestern Sichuan province, which will be placed one in front of the other. The satellites will shine from the light of the real Moon but will be eight times brighter.

What

1. The first man-made moon will launch from Xichang Satellite Launch Center in Sichuan, with three more to follow in 2022 if the first test goes well.
2. Though the first launch will be experimental, the 2022 satellites will be the real deal with great civic and commercial potential, said Wu Chunfeng, head of Tian Fu New Area Science Society — the organisation responsible for the project.
3. The project was announced by Wu at an innovation and entrepreneurship conference in Chengdu on October 10.
4. The man-made moons could replace streetlamps in urban areas, which would save an estimated 1.2 billion yuan (\$170 million) a year in electricity costs for Chengdu, if the man-made moons illuminate an area of 50 square kilometres. The light can also be helpful in disaster zones during blackouts.
5. Besides Tian Fu New Area Science Society, Harbin Institute of Technology and China Aerospace Science and Industry Corp are also involved in developing the man-made moons.
6. China is not the first country which is trying to make artificial lights with the help of Sunlight. In the 1990s, Russian scientists reportedly used giant mirrors to reflect light from space in an experimental project called Znamya or Banner.

## INDIA, MYANMAR AGREE TO TAKE ON INSURGENTS

India and Myanmar have agreed to take action against insurgent groups operating within their territories. Both sides also agreed to cooperate in preventing smuggling of wildlife and narcotic drugs. The two countries also agreed to strengthen cooperation on international border management including construction of subsidiary pillars to better demarcate the border.

What

1. At the 22nd national-level meeting between India and Myanmar held, where home secretary Rajiv Gauba represented the Indian side and deputy minister for home affairs Major General Aung Thu headed the visiting Myanmar delegation, the two countries agreed on security cooperation and facilitating movement of people and trade across the border.
2. Naga rebel outfit NSCN (Khaplang), an insurgent group said to be operating from camps across the border in Myanmar, had killed 18 Army personnel in an ambush in Manipur.
3. While the Indian Army had retaliated, hitting NSCN(K) camps on the Indo-Myanmar border and even across the border, there is still presence of its cadres in these territories. **India hopes Myanmar’s cooperation will help take down the remaining hideouts of NSCN(K).** The Myanmar delegation also called on Union home minister Rajnath Singh.

## INDIA, JAPAN INK PACT IN YOGA

India and Japan on 29 October 2018 decided to cooperate for the first time in the areas of Indian traditional medicinal systems such as Yoga and Ayurveda to provide holistic healthcare and wellness in both the countries. The Memorandum of Cooperation (MoC) between India’s Ministry of AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy) and the Kanagawa Prefectural Government was signed during the ongoing Prime Minister Narendra Modi’s visit to Japan.

What

1. The MOC will also complement another MoC to promote cooperation in the areas of National Health Protection Mission.
2. The MoC will complement another MoC concluded during the visit between Ministry of Health and Family Welfare of India and the Office of Healthcare policy **of the Cabinet Office of Japan & Japan's Ministry of Health.**
3. It aims to promote cooperation in the areas identified under the National Health Protection Mission, such as primary healthcare, prevention of non-communicable diseases, sanitation, hygiene, nutrition and elderly care, said a statement from the Ministry of External Affairs. Modi is in Japan to attend the 13th India-Japan annual summit.

## ECONOMY

### UN MODEL FOR CROSS-BORDER INSOLVENCY CASES

A high-level panel is likely to recommend a United Nations model for cross-border insolvency cases under the Insolvency and Bankruptcy Code, according to a senior official. The Insolvency Law Committee (ILC) is looking into the discussion paper related to having the UN model for cross-border insolvency matters as well as the comments received on the paper. Under the Code, there are provisions to deal with cross-border insolvency matters.

What

1. The panel, headed by Corporate Affairs Secretary Injeti Srinivas, is likely to recommend adoption of the United Nations Commission on International Trade Law (UNCITRAL) model to deal with such matter. The report is expected to be submitted soon, the official said.
2. The model would be on the basis of the Centre of Main Interests (COMI), which would be defined. In accordance with COMI, the place of main proceedings for cross-border cases would be decided.
3. Further, the official said it would be essentially a co-operation agreement and the proceedings would be at one place.
4. Established in 1966, UNCITRAL is a subsidiary body of the General Assembly of the UN with the general mandate to further the progressive harmonisation and unification of the law of international trade.
5. As per UNCITRAL, 'harmonisation' and 'unification' of the law of international trade refers to the process through which the law facilitating international commerce is created and adopted.
6. Harmonisation may conceptually be thought of as the process through which domestic laws may be modified to enhance predictability in cross-border commercial transactions.
7. Unification may be seen as the adoption by States of common legal standard governing particular aspects of international business transactions.

### RBI AGAINST INDEPENDENT REGULATOR

The Reserve Bank of India (RBI) on 19 October 2018 said there is no case for having a regulator for payment systems outside the central bank. The RBI has submitted a dissent note, released on 19 October 2018, against certain recommendations of the inter-ministerial committee for finalization of amendments to the Payment & Settlement Systems Act, 2007.

What

1. An inter-ministerial panel set up to finalize the Payment and Settlement System (PSS) Act had recommended that the payments regulator should be an independent regulator with the chairperson appointed by the government in consultation with the RBI.
2. This has been opposed by the central bank, which wants the chairperson to be from the central bank with a casting vote.

3. An independent payments regulatory board (PRB) needs to be established to regulate the payments sector aimed at fostering competition, consumer protection, systemic stability and resilience in the payments sector, said the draft Payment and Settlement System Bill, 2018, submitted by the committee to finalize the amendments to the Payment and Settlement Act, 2007.
4. **According to the RBI's dissent note**, the central bank believes that the PRB must remain with the central bank and headed by the RBI governor. The RBI and the government may nominate three members each to the board, with a casting vote for the governor, the RBI said.
5. The RBI cited the report of the Ratan Watal Committee on digital payments as recommending the establishment of the PRB within the overall structure of the RBI, arguing therefore that there is no need for any deviation.
6. There has been no evidence of any inefficiency in payment systems of India. The digital payments have made good and steady progress. India is gaining international recognition as a leader in payment systems. Given this, there need not be any change in a well-functioning system, said the RBI.
7. The central bank said that as payment systems are a sub-set of currency, which is regulated by it, the impact of monetary policy provides support for regulation of payment systems to be with the monetary authority.
8. There is an underlying bank account for payment systems under the purview of banking system regulation which is vested with the RBI.
9. Settlement systems are finally posted in the books of account of banks with the RBI to attain settlement finality, it said, adding that regulating these entities goes hand-in-hand with the settlement function.
10. The RBI said it is not totally against a new Payment and Settlement System Bill but stressed that changes should not lead to existing foundations being shaken in a well-functioning structure.

#### COPPER CONTRACTS GET SEBI'S NOD

Leading stock exchange BSE said it has received markets regulator Sebi's approval to launch copper contracts with a trading unit of one metric tonne (MT) on its newly launched commodity derivatives segment. Trading of these contracts will be launched on November 2, 2018, BSE -- formerly known as Bombay Stock Exchange -- said in a statement. The exchange forayed into commodity derivatives segment with the launch of gold and silver futures contracts on October 1.

What

1. BSE envisions becoming the most compliant exchange and emerging as a price setter in the commodities space.
2. The bourse is looking at offering cost-efficient, convenient and most disciplined framework that will help bring more market participants on board.
3. According to the bourse, the contract start day will be the first day of contract launch month and the final trading day will be the last day of contract expiry month. The commodity trading session will be from Monday to Friday from 10 am to 11.30/11.55pm.
4. Earlier this week, National Stock Exchange (NSE) said it has got permission

#### Flashback

1. The Bombay Stock Exchange (BSE) is an Indian stock exchange located at Dalal Street, Mumbai. It was established in 1875.
2. The BSE is **Asia's first stock exchange**. It claims to be the world's fastest stock exchange, with a median trade speed of 6 microseconds.
3. The BSE is the world's 10th largest stock exchange with an overall market capitalization of more than \$2.3 trillion on as of April 2018.
4. Bombay Exchange was founded by Premchand Roychand. He was one of the most influential businessmen in 19th-century Bombay.

from Sebi to launch copper large futures contract with a trading unit of 25 MT.

1.

## IBBI REGULATIONS 2018 NOTIFIED

The Insolvency and Bankruptcy Code, 2016 (Code) is a modern economic legislation. Section 240 of the Code empowers the Insolvency and Bankruptcy Board of India (IBBI) to make regulations subject to the conditions that the regulations: (a) carry out the provisions of the Code, (b) are consistent with the Code and the rules made there under; (c) are made by a notification published in the official gazette; and (d) are laid, as soon as possible, before each House of Parliament for 30 days.

What

1. Given the importance of subordinate legislations for the various processes under the Code, it is essential that the IBBI has a structured, robust mechanism, which includes effective engagement with the stakeholders, for making regulations.
2. Section 196 (1) (s) of the Code requires the IBBI to specify mechanisms for issuing regulations, including the conduct of public consultation processes, before notification of regulations.
3. In sync with this philosophy and the statutory requirement, the IBBI notified the Insolvency and Bankruptcy Board of India (Mechanism for Issuing Regulations) Regulations, 2018 (Issuing Regulations) to govern the process of making regulations and consulting the public .
4. The Issuing Regulations provide that for the purpose of making or amending any regulations, the IBBI shall upload the following, with the approval of the Governing Board, on its website seeking comments from the public-

### Draft of proposed regulations

1. The specific provision of the Code under which the Board proposes regulations;
2. A statement of the problem that the proposed regulation seeks to address;
3. An economic analysis of the proposed regulations;
4. A statement carrying norms advocated by international standard setting agencies and the international best practices, if any, relevant to the proposed regulation;
5. The manner of implementation of the proposed regulations; and
6. The manner, process and timelines for receiving comments from the public.

## RBI ALLOWS BANKS TO LEND MORE TO SOME NBFCS

The Reserve Bank 19 October 2018 announced more measures to increase liquidity flows to the non-banking financial companies. The RBI permitted banks to use government securities equal to their incremental outstanding credit to NBFCS, over and above their outstanding credit to them as on October 19, to be used to meet liquidity coverage ratio requirements.

What

1. The move will help provide liquidity to housing finance companies (HFCs) and non-banking finance companies (NBFCS) which have come under pressure following series of default by IL&FS group companies.
2. Banks will be permitted to also reckon Government securities held by them up to an amount equal to their incremental outstanding credit to NBFCS and HFCs, over and above the amount of credit to NBFCS and HFCs outstanding on their books as on October 19, 2018, as Level 1 HQLA under FALLCR within the mandatory SLR requirement.
3. This will be in addition to the existing FALLCR of 13 per cent of total deposits, and **limited to 0.5 per cent of the bank's total deposits. Liquidity coverage ratio refers**

to highly liquid assets that financial institutions need to hold in order to meet short-term obligations.

4. The additional window will be available up to December 31, 2018, the notification said. Besides, it said, the single borrower exposure limit for NBFCs which do not finance infrastructure stands increased from 10 per cent to 15 per cent of capital funds, up to December 31, 2018.
5. The RBI has been taking series of steps to infuse liquidity in the system. It has also been undertaking open market operation at regular intervals to add liquidity.
6. Despite this announcement, shares of NBFCs and HFCs continued to trade lower. Indiabulls Housing Finance slumped 15.55%, DHFL fell 11%, IIFL Holdings plunged 11.28% and Edelweiss Financial Services lost 7.8%.

## FPSB INDIA TO END GLOBAL AFFILIATION

FPSB India, the Indian affiliate of US-based FPSB, has served a notice of termination on the latter, stating that the affiliation and licence arrangement between the two would end on March 31 next year. In July, FPSB had decided not to renew its licensing agreement with FPSB India due to expire on March 31, 2020. FPSB had found evidence of financial impropriety at FPSB India and was not happy with the way the certified financial planner (CFP) certification was promoted over the years.

What

1. In a letter addressed to the chairman and chief executive of FPSB, the Indian affiliate stated that the US entity had directly approached FPSB India stakeholders and attempted to offer redress on various matters without FPSB **India's advice**.
2. FPSB India also said it would continue to comply with its roles and responsibilities under the said affiliation agreement till March 31 next year. FPSB, meanwhile, has tried to assuage concerns of hundreds of CFPs in India.
3. FPSB enters into licensing and affiliation agreements with non-profit organisations, or their equivalent around the world, authorising them to administer the CFP certification programme on behalf of FPSB.
4. At present, FPSB has member organisations in 26 territories with more than 175,000 CFPs. These include India, Australia, Brazil, Canada, China, Colombia, Singapore, South Africa and Thailand.
5. FPSB India is promoted by 44 financial services organisations and is the licensing authority for CFP marks. India had 2,036 CFP holders at the end of the calendar year 2017, compared with 17,523 in China, 4,766 in South Africa and 3,409 in Brazil.
6. In an earlier letter sent to CFP aspirants in India, Maye had said FPSB would evaluate options to develop a business plan and success metrics for the financial planning profession and CFP certification in India.
7. FPSB remains committed to building the financial planning profession and CFP certification programme so that consumers in India can access financial advice and financial planning from competent and ethical professionals.

### Flashback

1. Financial Planning Standards Board (FPSB) India is an Indian professional body based in Mumbai that deals with setting professional standards.
2. Its mission is to develop and promote financial standards to benefit and protect the entire nation as a whole.
3. FPSB India works closely with nearly all aspects of the Indian economy.
4. As a professional membership and certification firm, it is part of a global organization to establish beneficial and universal standards for financial planning in India and works with prominent financial service corporations.

## ONLY INDIAN FIRM TO GET FOREIGN LABOUR CERTIFICATION

Tata Consultancy Services is the only Indian company among top 10 firms to get foreign labour certification for the H-1B visas for the fiscal year 2018, according to data from the US Department of Labour. The H-1B visas are the most sought-after among Indian IT professionals. The visa programme allows employers to temporarily employ foreign workers in the US on a non-immigrant basis in specialty occupations or as fashion models of distinguished merit and ability.

What

1. London-headquartered Earnest and Young, a multinational professional services firm, has emerged as the top employer to have received the certification.
2. Ernest and Young is followed by Deloitte Consulting which received 69,869 H-1B specialty occupations labour conditions programme.
3. Indian-American owned Cognizant Technology Corp comes at number three with 47,732 specialty occupations labour conditions programme, the Department of Labour said in its latest annual report.
4. Cognizant is followed by HCL America (42,820), K Force Inc (32,996), and Apple (26,833).
5. **India's Tata Consultancy Service** or TCS is the only Indian company in top 10 for the year 2018.
6. According to the Department of Labour in the fiscal year 2018, ending on September 30, TCS had received 20,755 H-1B specialty occupation labour certifications.
7. Qualcomm Technologies (20,723), Mphasis Corporation (16,671) and Capgemini America (13,517) are the other companies in top 10.
8. According to Department of labour, a specialty occupation requires the theoretical and practical application of a body of specialised knowledge and a **bachelor's** degree or the equivalent in the specific specialty (e.g. sciences, medicine, health care, education, biotechnology, and business specialties, etc.).
9. Congress has limited the annual number of qualifying foreign workers who may be issued a visa or otherwise be provided the H-1B status to 65,000 with an additional 20,000 under the H-1B advanced degree exemption.
10. Before applying for the H-1B visas the employer submits a labour condition application to the Department of labour. Companies can proceed with the H-1B petitions, only after they receive such a certification by the Department of labour.

## GOVERNMENT VS RBI

The government has sent letters to the Reserve Bank of India (RBI) seeking consultations on key regulatory issues under a never-before-used provision in the law. The government has written to the RBI hinting it may invoke Section 7 of the Reserve Bank of India Act 1934 – a provision that has never been used since the inception of the law – to issue directions on relaxing prompt corrective action (PCA) norms, liquidity to non-banking financial companies (NBFCs), among others.

What does Section 7 of the RBI Act say?

1. According to it, the Central government may issue directions to the RBI as it may “consider necessary in public interest” **after consultation with the RBI Governor. Section 7 deals with ‘management’ of RBI.**
2. This provision took centre stage earlier this year when the Allahabad High Court was hearing a petition from power companies who challenged stringent non-performing assets (NPA) norms notified by the RBI in February, also popularly known as the February 12 circular.
3. The court had asked the central government to hold consultations with the RBI, under Section 7 of the RBI Act 1934, on the way forward for stressed power assets within 15 days. But the government had decided against using this provision at that time.
4. The Central Government, however, is not expected to issue any directions, as contemplated under Section 7(1), indiscriminately or randomly. Such directions

are possible when there exists **sufficient material in support,**” the high court had observed in its order dated August 28.

5. The counsel representing RBI had said that **Section 7 of the RBI Act “embodies and puts in place a forum for resolution of all questions and is in one sense the repository mechanism for dealing with issues which constitute a “conflict zone”.**

History of the provision

1. Going back in history, the RBI had itself drafted a provision combining the provisions of the Bank of England Act, 1946 and Commonwealth Bank of Australia, 1945, **on the central government’s powers to issue directions to the central bank.**
2. **It had, however, suggested that the Act makes it clear “when government decided to act against the advice of the (RBI) Governor, they took the responsibility for the action they wished to force on the (Reserve) Bank, according to the Volume I of the History of the Reserve Bank of India (1935-1951).**
3. However, the government at that time was not in favour of this provision and the clause was re-drafted accordingly. Though the Reserve Bank of India had sought **for a more elaborate provision requiring the government to ‘accept responsibility’** for the action resulting from its directions, the Section 7 of the RBI Act was amended in 1949 to empower the central government to issue directions to the central bank in public interest.

## FIRST INVESTMENT OF **NIIF’S STRATEGIC FUND**

The National Investment and Infrastructure Fund (NIIF) of India on 31 October 2018 said that it had acquired IDFC Infrastructure Finance Limited (IDFC-IFL), a non-banking finance company registered with the Reserve Bank of India as an infrastructure debt fund. IDFC-IFL lends to operating infrastructure projects, and thereby enables the original project financiers to recycle their capital following the commencement of operations. The company has a loan book of more than Rs4,500 crore, strong asset quality and no material repayment obligations for the next two years.

What

1. **This acquisition is the first investment from the NIIF’s Strategic Fund** and the first control transaction for the NIIF. The acquisition is subject to approval from the RBI and customary closing conditions.
2. Building on this acquisition will allow the NIIF to play a meaningful role in the private debt space in Indian Infrastructure, where we see a growing need **given India’s infrastructure ambition, an emerging gap as traditional infrastructure lenders consolidate and the potential for attractive returns.**
3. The long-term nature of the NIIF’s Strategic Fund, its strong governance and underwriting standards, combined with the NIIF’s ability to attract capital will allow us to build on a strong platform created by IDFC and to continue to grow **the business,”** said Sujoy Bose, managing director and chief executive at the NIIF.
4. This investment demonstrated the ability of the NIIF to make commercially attractive counter-cyclical investments, since it came at a time when the NBFC sector was facing headwinds.
5. The government had set up the NIIF in 2015 as an investment vehicle for funding commercially viable greenfield, brownfield and stalled infrastructure projects.
6. The government is investing 49% and the rest of the corpus is to be raised from third-party investors, such as sovereign wealth funds, insurance and pension funds, endowments.

7. **The NIIF's mandate includes investing** in areas such as energy, transportation, housing, water, waste management and other infrastructure-related sectors in India.

## SCIENCE AND TECHNOLOGY

### CSIR DEVELOPS LESS POLLUTING FIRECRACKERS

CSIR scientists have developed Less Polluting Firecrackers which are not only environment friendly but 15-20 % cheaper than the conventional ones, said Dr Harsh Vardhan, Union Minister for Science & Technology, Earth Sciences, Environment, Forest & Climate Change. These crackers have been named as safe water releaser (SWAS), safe minimal aluminium (SAFAL) and safe thermite cracker (STAR).

What

1. This endeavour of CSIR aims at addressing the pollution concerns at the same time protecting the livelihoods of those involved in this trade.
2. First time in India, an Emission testing Facility has been established at CSIR-NEERI and extensive testing is in progress for conventional and green crackers for monitoring the emissions and sound. This facility uses all sophisticated instruments for measurement and sampling when firecrackers are used.
3. The Minister informed that a raw material characterization facility is also coming up as it has been found that many times the poor quality raw materials used in fire crackers are the major sources of particulate matter pollution.
4. CSIR would be detailing further strengthening by installation of additional facilities for raw materials testing at Sivakasi.
5. This activity is likely to be initiated for testing in next two months after completion of certain formalities. This facility can come up in collaboration and partnership **with Manufacturers'** association Testing facilities.
6. Taking a comprehensive view of the firecracker sector, Dr. Harsh Vardhan said that in tune with its Scientific Social Responsibility, CSIR has been working on long term and futuristic goals which would lead to clean and safe Diwali.

Technical Details

1. The crackers have been named as safe water releaser (SWAS), safe minimal aluminium (SAFAL) and safe thermite cracker (STAR).
2. It has unique property of releasing water vapour and /or air as dust suppressant and diluent for gaseous emissions and matching performance in sound with conventional crackers.
3. SWAS crackers eliminates usage of (KNO<sub>3</sub>) Potassium nitrate and Sulphur with consequent reduction in particulate matter (30-35%) SO<sub>2</sub> and NO<sub>x</sub>. It has matching sound intensity with commercial crackers in the range of 105-110 dBA. SWAS has been tested for shelf life upto 3 weeks with consistent performance.
4. STAR eliminates usage of KNO<sub>3</sub> and S with consequent reduction in particulate matter (35-40%), SO<sub>2</sub> and NO<sub>x</sub>. It has matching sound intensity with commercial crackers in the range of 105-110 dBA.
5. SAFAL has minimal usage of aluminium (only in flash powder for initiation) with consequent significant reduction in particulate matter (35-40 %) compared to commercial crackers. It has matching sound intensity with commercial crackers in the range of 110-115 dBA.
6. E-crackers- CSIR-CEERI, being an electronics laboratory, is developing safe and pollution free technology of electronic crackers (E-crackers) to meet latent social aspiration of enjoying fireworks.
7. It includes various products like E-Ladi, E-Anar, system for E-cracker show etc. At present CSIR-CEERI is ready with the laboratory level prototype of E-Ladi.
8. E-Ladi is based on high-voltage electrostatic discharge to generate light/sound effect. It is triggered by providing heat to the thermal switch which will give the excitement of firing the conventional cracker.

- The E-Ladi is also programmable to give various light/sound effect. The team from CSIR-CEERI Pilani has developed functional prototype of E-Ladi, demonstration is also planned in next two months.

#### Developed prototype of E-Ladi

- Post combustion control system and devices: CSIR-NEERI has also planned to use area source control through development of new systems called PURE-WAYU as also photochip material for local dust control. The system is being tested currently.
- Reduced Emission crackers: CSIR-CECRI, Karaikudi has developed reduced emission crackers through the replacement of commonly used Aluminium with Magnesium and Magnesium based compounds in flash powder.
- Flower pot essentially comprises of alkali nitrates, Aluminium powders of different grain sizes and in some cases the binder to enhance luminescence.
- Aluminium has been used as a primary heat source and to produce flash. In order to reduce the ignition temperature and subsequently to minimize the particulate matter, Magnesium could be a viable alternative to Aluminium.
- CSIR-NEERI is testing the efficacy of Bijli cracker by eliminating the use of ash as desiccants for reduction in particulate matter by 20%.
- Potential sound emitting functional prototypes have been developed by team at CSIR NEERI based on the novel concept of exploiting exothermic heat of materials for bursting of crackers with consequent reduction in particulate matter (30-35%), no emission of SO<sub>2</sub> and low cost due to avoidance of usage of conventional oxidants.

#### Network of CSIR laboratories involved

The networking laboratories of CSIR including: CSIR-Central Electronics Engineering Research Institute (CSIR-CEERI), CSIR-Central Electrochemical Research Institute (CSIR-CECRI), CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI), CSIR-Central Leather Research Institute (CSIR-CLRI), CSIR-Indian Institute of Chemical Technology (CSIR-IICT), CSIR-Indian Institute of Toxicology Research (CSIR-IITR), CSIR-National Botanical Research Institute (CSIR-NBRI), CSIR-National Chemical Laboratory (CSIR-NCL), CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) have formulated a project with a specific goal to enhance CSIR innovation ability for developing globally competitive, cutting edge technologies for reduced emission firework

## SPACECRAFT SEND TO MERCURY

European and Japanese space agencies said an Ariane 5 rocket successfully lifted a spacecraft carrying two probes into orbit on 20 October 2018 for a joint mission to Mercury, the closest planet to the sun. The European Space Agency and the Japan Aerospace Exploration Agency said the unmanned BepiColombo spacecraft successfully separated and was sent into orbit from French Guiana as planned to begin a seven-year journey to Mercury. The spacecraft, named **after Italian scientist Giuseppe "Bepi" Colombo**, was in the right orbit and has sent the first signal after the liftoff.

#### What

- The 1.3 billion-euro (\$1.5 billion) mission is one of the most challenging in its history. **Mercury's extreme temperatures**, the intense gravity pull of the sun and blistering solar radiation make for hellish conditions.
- The BepiColombo spacecraft will have to follow an elliptical path that involves a fly-by of Earth, two of Venus and six of Mercury itself so it can slow down before arriving at its destination in December 2025.
- When it arrives, BepiColombo will release two probes — Bepi and Mio — that will independently investigate the surface and magnetic field of Mercury.

4. The probes are designed to cope with temperatures varying from 430 degrees Celsius (806 F) on the side facing the sun, and -180 degrees Celsius (-292 F) in **Mercury's shadow**.
5. Scientists **hope to build on the insights gained by NASA's Messenger probe**, which ended its mission in 2015 after a four-year orbit of Mercury.
6. **The only other spacecraft to visit Mercury was NASA's Mariner 10** that flew past the planet in the mid-1970s.
7. Mercury, **which is only slightly larger than Earth's moon**, has a massive iron core about which little is known. Researchers are also hoping to learn more about the formation of the solar system from the data gathered by the BepiColombo mission.
8. It is the second recent cooperation between the Europeans and the Japan Aerospace Exploration Agency. **JAXA's Hayabusa2 probe** dropped a German-French rover on the asteroid Ryugu earlier this month.

## NEW GAMMA-RAY CONSTELLATIONS NAMED

NASA has used certain characters from modern **myths such as the "Hulk" and "Godzilla" to name its new set of 21 gamma-ray** constellations constructed in celebration of its Fermi **Gamma-ray Space Telescope's 10th year of operations**. Fermi has mapped about 3,000 gamma-ray sources — 10 times the number known before its launch and comparable to the number of bright stars in the traditional constellations.

What

1. For the first time ever, the number of known gamma-ray sources was comparable to the number of bright stars, so we thought a new set of constellations **was a great way to illustrate the point**, NASA's Goddard Space Flight Center's Elizabeth Ferrara who led the constellation project said.
2. Developing these unofficial constellations was a fun way to highlight a decade of **Fermi's accomplishments**.
3. Comic book fans who know the backstory of Hulk, the big, green, angry alter ego of Bruce Banner, whose experiments with gamma rays went terribly wrong, **could easily appreciate NASA's pick in naming one of its constellations**.
4. Gamma rays are the strongest form of light. They pack enough punch to convert into matter under the right circumstances, a transformation both Banner and the Hulk would certainly appreciate.
5. **NASA's choice of Godzilla constellation is linked to its trademark weapon "heat ray," a fiery jet. This** bears at least a passing resemblance to gamma-ray jets associated with black holes and neutron stars.
6. **Godzilla ranks as one of cinema's most famous monsters** and is among the most recognisable symbols of Japanese popular culture.
7. In the original 1954 movie, **nuclear weapons tests disturb the creature's deep ocean habitat**, and it emerges from the sea to wreak havoc in Japan.
8. The 21 gamma-ray constellations also include famous landmarks — such as **Sweden's recovered warship, Vasa**, the Washington Monument and Mount Fuji in Japan — in countries contributing to Fermi science.
9. **Since 2008, Fermi's Large Area Telescope (LAT) has been scanning the entire sky each day**, mapping and measuring sources of gamma rays, the highest-energy light in the universe.
10. The emission may come from pulsars, nova outbursts, the debris of supernova explosions and giant gamma-ray bubbles located in our own galaxy, or supermassive black holes and gamma-ray bursts — the most powerful explosions in the cosmos — in others.

## LARGEST KNOWN STRUCTURE OF EARLY UNIVERSE

A team of scientists at the European Southern Observatory (ESO) has sited the most massive structure in the early universe known to date. The astronomers, led by **Olga Cucciati of Bologna's National Astrophysics Institute**, found this galaxy proto-

supercluster — Hyperion — using new measurements made by the visible multi-object spectrograph of ESO's Very Large Telescope and pouring over vast arrays of archive data.

What

1. This is the first time that such a large structure has been identified at such a high redshift, just over two billion years after the Big Bang.
2. Normally, these kinds of structures are known at lower redshifts, which means when the universe has had much more time to evolve and construct such huge things.
3. The VIMOS, an instrument that measures objects at a distance of billions of light years away, in practice allows experts to see what the early universe was like in the distant cosmic past.
4. **Hyperion's unimaginably enormous mass is estimated to be a million billion** times that of our own Sun (which is approximately 1,048 Jupiters, or 333,000 Earths).
5. Understanding Hyperion and how it compares to similar recent structures can give insights into how the universe developed in the past and will evolve into the future, and allows us the opportunity to challenge some models of supercluster formation.

## FLESH-EATING FISH IDENTIFIED

Researchers have identified a new species of piranha-like fish that lived in the sea about 150 million years ago during the time of the dinosaurs. The bony fish, described in the journal Current Biology, had teeth like a piranha, which the researchers suggest they used to bite off chunks of flesh from other fish. Australia's oceans are home to many deadly creatures, from tiny jellyfish to huge great white sharks.

What

1. The victims were other fish that had apparently been nibbled on in the same limestone deposits in South Germany where the fish was found.
2. This is an amazing parallel with modern piranhas, which feed predominantly not on flesh but the fins of other fishes. **It's a remarkably smart** move as fins regrow, a neat renewable resource.
3. The newly described fish is part of the world famous collections in the Jura-Museum in Germany. It comes from the same limestone deposits that contained Archaeopteryx.
4. The tooth pattern and shape, jaw morphology, and mechanics suggest a mouth equipped to slice flesh or fins.
5. The evidence points to the possibility that the early piranha-like fish may have exploited aggressive mimicry in a striking parallel to the feeding patterns of modern piranha.
6. It is remarkable that the fish is from the Jurassic. Fish as we know them, bony fishes, just did not bite flesh of other fishes at that time, researchers said.
7. Sharks have been able to bite out chunks of flesh but throughout history, bony fishes have either fed on invertebrates or largely swallowed their prey whole. Biting chunks of flesh or fins was something that came much later.
8. The new finding represents the earliest record of a bony fish that bit bits off **other fishes, and what's** more it was doing it in the sea.

## WEB PORTAL OF SPARC LAUNCHED

The Minister of Human Resource Development, Shri Prakash Javadekar launched **the web portal of the Scheme "Scheme for Promotion of Academic and Research Collaboration (SPARC)" in New Delhi** on 25 October 2018. SPARC scheme aims at **improving the research ecosystem of India's higher educational institutions** by facilitating academic and research collaborations between Indian Institutions and the best institutions in the world.

What

1. Under this Scheme, 600 joint research proposals will be awarded for 2 years to facilitate strong research collaboration between Indian research groups with the best in class faculty and renowned research groups in the leading universities of the world, in areas that are at the cutting edge of science or with direct social relevance to the mankind, specifically India.
2. The Government in **August 2018 had sanctioned the scheme “Scheme for Promotion of Academic and Research Collaboration (SPARC)” at a total cost of Rs.418 Cr for implementation up to 31.3.2020 and Indian Institute of Technology Kharagpur is the National Coordinating Institute to implement the SPARC programme.**

Salient Features of SPARC are

1. This scheme will improve research ecosystem of **India’s higher educational institutions** by facilitating academic and research collaborations between Indian Institutions [overall top-100 or category-wise top-100 in NIRF (including such Private Institutions which are recognized under 12(B) of UGC Act)] and the best institutions in the world (top-500 overall and top-200 subject-wise institutions listed in QS World University Ranking) from 28 selected nations [Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, Hong Kong, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Russia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, United Kingdom(UK), United States of America(USA)] to jointly solve problems of national and international relevance. As per the criteria mentioned above, 254 top Indian Institutes and 478 top ranked global Institutes have been already identified.
2. A set of 5 Thrust Areas (Fundamental Research, Emergent Areas of Impact, Convergence, Action-Oriented Research and Innovation-Driven) and sub-theme areas in each thrust area has been identified for collaboration under SPARC based on emergent relevance and importance for the nation.
3. Each Thrust Area will have a Section Chair. The role of Section Chair of each Thrust Area is to review shortlist and recommend the potential joint-proposals submitted under SPARC scheme.
4. A set of Nodal Institutions (NI), from India, for each participating foreign country has been identified. The role of a NI is to help, handhold and coordinate with willing Participating Indian (PI) Institutions to forge alliance with the Institutions of concerned participating foreign country, for academic and research collaboration. 25 such reputed Institutions have been notified as Nodal Institutions.

SPARC proposes to enable productive academic cooperation by supporting the following critical components that can catalyze impact making research:

1. Visits and long-term stay of top international faculty/researchers in Indian institutions to pursue teaching and research
2. Visits by Indian students for training and experimentation in premier laboratories worldwide
3. Joint development of niche courses, world-class books and monographs, translatable patents, demonstrable technologies or action oriented research outcomes and products ,
4. Publication , Dissemination and Visibility through a high profile annual international conference in India

## SIGNS OF SUPERMASSIVE BLACK HOLE MERGERS FOUND

Scientists have found evidence for a large number of double supermassive black holes, likely precursors of gigantic black hole merging events. The research, published in the journal Monthly Notices of the Royal Astronomical Society, confirms the

current understanding of cosmological evolution – which galaxies and their associated black holes merge over time, forming bigger and bigger galaxies and black holes.

What

1. Astronomers from the University of Hertfordshire in the UK and colleagues looked at radio maps of powerful jet sources and found signs that would usually be present when looking at black holes that are closely orbiting each other.
2. Before black holes merge they form a binary black hole, where the two black holes orbit around each other.
3. Gravitational wave telescopes have been able to find evidence of the merging of smaller black holes since 2015, by measuring the strong bursts of gravitational waves that are emitted when binary black holes merge.
4. However, current technology cannot be used to demonstrate the presence of supermassive binary black holes.
5. Supermassive black holes emit powerful jets. When supermassive binary black holes orbit, it causes the jet emanating from the nucleus of a galaxy to periodically change its direction.
6. Astronomers studied the direction that these jets are emitted in, and variances in these directions.
7. They compared the direction of the jets with the one of the radio lobes (that store all the particles that ever went through the jet channels) to demonstrate that this method can be used to indicate the presence of supermassive binary black holes.

## HUBBLE SPACE TELESCOPE RETURNS

**NASA's famed Hubble Space Telescope has returned to normal operations**, and completed its first science observations after a failed orienting tool forced engineers to put it in safe mode earlier this month. The observations were of the distant, star-forming galaxy DSF2237B-1-IR and were taken in infrared wavelengths with the Wide Field Camera 3 instrument, NASA said.

What

1. The return on October 26 to conducting science comes after successfully recovering a backup gyroscope, or gyro, that had replaced a failed gyro three weeks earlier.
2. A gyro is a device that measures the speed at which the spacecraft is turning, which is necessary to help Hubble turn and lock on to new targets.
3. **One of Hubble's gyros failed on October 5, and the spacecraft's operations team activated a backup gyro the next day.** However, the backup incorrectly returned rotation rates that were far in excess of the actual rates.

## PARKER BECOMES CLOSEST TO SUN

**NASA's historic Parker Solar Probe** – enroute to the Sun to unravel its mysteries – has become the closest spacecraft to it. The spacecraft passed the current record of 26.55 million miles from the **Sun's surface on October 29**, as calculated by the Parker Solar Probe team, NASA said. The previous record for closest solar approach was set by the German-American Helios 2 spacecraft in April 1976.

What

1. As the Parker Solar Probe mission progresses, the spacecraft will repeatedly break its own records, with a final close approach of 3.83 million miles from the **Sun's** surface expected in 2024.
2. **It's been just 78 days since Parker Solar Probe launched, and we've now come closer to our star than any other spacecraft in history**, said Project Manager Andy Driesman from the Johns Hopkins Applied Physics Laboratory in Laurel, Maryland.
3. **It's a proud moment** for the team, though we remain focused on our first solar encounter, which begins on October 31.

4. **The Parker Solar Probe team periodically measures the spacecraft's precise speed and position using NASA's Deep Space Network or DSN.**
5. Parker Solar Probe will begin its first solar encounter on October 31, **continuing to fly closer and closer to the Sun's surface until it reaches its first perihelion – the point closest to the Sun – on November 5.**
6. The spacecraft will face brutal heat and radiation conditions while providing humanity with unprecedentedly close-up observations of a star and helping us understand phenomena that have puzzled scientists for decades.
7. Earlier this month, the probe successfully completed its first flyby of Venus at a distance of about 1,500 miles. Throughout its mission, the probe will make six more Venus gravity assist and 24 total passes by the Sun.

## MISCELLANEOUS

### TAGORE AWARD FOR CULTURAL HARMONY

The Tagore Award for Cultural Harmony for the years 2014, 2015 & 2016 is being conferred on the doyen of Manipuri dance Sh. Rajkumar Singhajit Singh; Chhayanaut (a cultural organization of Bangladesh) and on **one of India's** greatest sculptors, Sh. Ram Vanji Sutar, respectively.

What

1. Shri Rajkumar Singhajit Singh, a doyen of Manipuri dance, has distinguished himself both as an outstanding teacher, performer and choreographer.
2. His work over the years bears witness to his creativity within the framework of traditional Manipuri dance. His choreography has been enriched by elements incorporated from various forms of performing arts of Manipur such as Thang-ta, Nata-Sankirtana, Lai-haraoba and Rasleela.
3. The award recognizes his contribution in keeping the tradition of Manipuri dance alive and vibrant, promoting harmony through dance and also pays tribute to Gurudev Rabindranath Tagore, who, deeply influenced by Manipuri dance, made it an integral part of the education curriculum at Visva Bharati.
4. Chhayanaut, established in 1961, has played a leading role in promoting **Tagore's works and Bengali culture**, music and literature not only within Bangladesh, but all across the world.
5. It has built a close bridge of understanding and cultural exchange between Bangladesh and India, especially West Bengal.
6. Chhayanaut was part of the movement for an independent Bangladesh and provided a platform for cultural expression and assertion of Bengali identity. When Rabindra Sangeet was banned in East Pakistan, Chhayanaut continued to promote liberal expression through secret renditions of Tagore songs and discussions on Tagore.
7. The jury's decision recognizes the contribution of the organization in upholding the liberal progressive tradition of universal humanism of Gurudev and in promoting the spirit of cultural harmony.

#### Flashback

1. The annual award was instituted by the Government of India during the commemoration of 150th Birth Anniversary of Gurudev Rabindranath Tagore.
2. The first Tagore Award was conferred on Pt. Ravi Shankar; the Indian Sitar Maestro in 2012 and second was conferred on Shri Zubin Mehta in 2013.
3. The award carries an amount of Rs. 1 crore, a citation in a scroll, a plaque as well as an exquisite traditional handicraft/ handloom item.
4. The award is open to all persons regardless of nationality, race, language, caste, creed or sex.

8. Sh. Ram Vanji Sutar is one of the greatest living sculptors of India. He has created more than fifty monumental sculptures in the last forty years of his career.
9. At the beginning of his career, he was involved in restoring several ancient sculptures found in the caves of Ellora and Ajanta.
10. His first notable work was the 45 feet Chambal monument at the Gandhi Sagar Dam, in Madhya Pradesh. This gigantic masterpiece carved out of a single block depicts mother Chambal with her two children- Madhya Pradesh and Rajasthan symbolizing the brotherhood of the two states.
11. His iconic bust of Mahatma Gandhi is one of the most celebrated representations of the Mahatma, as is his bronze bust of Gurudev Rabindranath Tagore. The jury's decision recognizes his outstanding contribution to the preservation of Indian culture and its artistic tradition.

## MAN BOOKER PRIZE 2018

"Milkman" by writer Anna Burns scooped the 2018 Man Booker Prize, with the Northern Irish writer winning the literary award for her third full-length novel. Set in an unnamed city during the bloody "Troubles" of Northern Ireland, the "Milkman" tells the coming-of-age story of a young girl's affair with an older man.

What

1. As winner, the 56-year-old writer, who was born in Belfast, received the award from Prince Charles' wife Camilla, the Duchess of Cornwall, as well as 50,000 pounds (\$65,900).
2. Anna Burns' utterly distinctive voice challenges conventional thinking and form in surprising and immersive prose, Kwame Anthony Appiah, who chaired the prize's panel of judges said.
3. It is a story of brutality, sexual encroachment and resistance threaded with mordant humour. Set in a society divided against itself, 'Milkman' explores the insidious forms oppression can take in everyday life.
4. Established in 1969, the annual literary prize recognises the judges choice of "the best original novel written in English and published in the UK".
5. This year's shortlist was made up of writers from the United Kingdom, Canada and the United States.

## PM AWARDED SEOUL PEACE PRIZE 2018

The Seoul Peace Prize Committee has decided to confer the 2018 Seoul Peace Prize on Prime Minister Shri Narendra Modi, in recognition of his dedication to improving international cooperation, raising global economic growth, accelerating the Human Development of the people of India by fostering economic growth in the world's fastest growing large economy and furthering the development of democracy through anti-corruption and social integration efforts.

What

1. While awarding the 2018 Seoul Peace Prize, the Award Committee recognized Prime Minister Modi's contributions to the growth of the Indian and global economies, crediting 'Modinomics' for reducing social and economic disparity between the rich and the poor.
2. The Committee lauded PM's initiatives to make the government cleaner through anti-corruption measures and demonetization.
3. The Committee also credited Prime Minister for his contribution towards regional and global peace through a proactive foreign policy with countries around the world under the 'Modi Doctrine' and the 'Act East Policy.' Prime Minister Modi is the fourteenth recipient of this award.
4. Expressing his gratitude for the prestigious honour and in light of India's deepening partnership with the Republic of Korea, Prime Minister Modi has accepted the award.

- The award will be presented by the Seoul Peace Prize Foundation at a mutually convenient time.

#### Background

- The Seoul Peace Prize was established in 1990 to commemorate the success of the 24th Olympic Games held in Seoul, Republic of Korea – an event in which 160 nations from across the world took part, creating harmony and friendship and a worldwide atmosphere of peace and reconciliation.
- The Seoul Peace Prize was established to crystallize the Korean people's yearning for peace on the Korean Peninsula and in the rest of the world.
- The Seoul Peace Prize has been awarded biennially to those individuals who have made their mark through contributions to the harmony of mankind, reconciliation between nations and to world peace.
- Past laureates include distinguished global personalities like former UN Secretary General Kofi Annan, German Chancellor Angela Merkel and renowned international relief organizations like Doctors Without Borders and Oxfam.
- After assessing over a hundred candidates proposed by over 1300 nominators from around the world, the Award Committee decided to bestow the Prize on Prime Minister Modi, calling him 'the perfect candidate for the 2018 Seoul Peace Prize.

#### BEST AGRICULTURE AWARD

For its innovation and technological advancement in farming, the Gujarat state received 'Best Agriculture Award' by the Indian Council of Food and Agriculture (ICFA) at the '11th Global Agriculture Leadership Summit and Leadership Awards - 2018' in New Delhi.

#### What

- M S Swaminathan was the chairman of the jury for the awards.
- Gujarat has adopted several initiatives towards better farming practices and spreading awareness for the same.
- Its efforts such as Krishi Mahotsav, Soil Health Card, Water conservation, micro-irrigation, horticulture, post harvest management, dairy and animal husbandry were among the noteworthy interventions.
- The state has been successful in containing the pink-bollworm menace in the cotton crop, State's largest kharif crop.
- Over the past couple of years, Gujarat has taken up initiatives in the areas of satellite imagery and GIM mapping besides drone survey for agriculture.

#### 1st World Agriculture Prize

- Renowned agricultural scientist and the chief architect of the green revolution in India, MS Swaminathan, was awarded the first World Agriculture Prize for his contributions to Indian agriculture by Vice-President Venkaiah Naidu in New Delhi on 26 October 2018.
- While giving away the award, which carries prize money of \$1,00,000 (73,45,500 rupees), instituted by the nongovernmental Indian Council of Food and Agriculture.
- Receiving the prize, Swaminathan said: **“There is no agriculture without farmers. It is the basic need of people and it cannot be commercialised”.**

#### CAPAM AWARD 2018

The Department of Administrative Reforms and Public Grievances (DARPG), Ministry of Personnel, Public Grievances and Pensions is an institutional member

of Commonwealth Association for Public Administration and Management (CAPAM) which is a non-profit association representing an international network of over 1100 senior public servants, Heads of Government, leading academics and researchers located in over 50 different countries across the Commonwealth.

What

1. The association is guided by international leaders who believe in the value of networking, knowledge exchange and the promotion of good governance for the betterment of citizens in the Commonwealth countries.
2. CAPAM has been announcing its International Innovations Awards (IIA) Programme bi-annually, since 1998.
3. Shri K. V. Eapen, Secretary, Department of Administrative Reforms & Public Grievances(DARPG) has been elected to the Board of Commonwealth Association of Public Administration & Management(CAPAM) at the Annual General Members Meet held on 23rd October, 2018 at Georgetown, Guyana.
4. During the Conference, CAPAM Innovation Awards were announced. Government of India had sent entries for CAPAM International Innovations Awards, 2018 under various categories
5. The CAPAM Awards celebrate the spirit of innovation in the public service by recognizing organizations that have made significant contributions to improve governance and services in the public sector.
6. **The initiative entitled “Unnayan Banka- Reinventing Education Using Technology of Banka District, State of Bihar has been awarded under the Category “Innovation Incubation”.**
7. **“Unnayan Banka” is an initiative which envisages “Quality education for all” especially for those at the bottom of the Pyramid, using latest technologies.**
8. **It’s a holistic model of overall development of youths from Education to Employability.** One of the most important Millennium Development Goals, “Education” is the great social Mobiliser & must be everyone’s Birthright and it is Government of India’s endeavour to provide this to all its children.
9. **Another initiative entitled “Unified Agriculture Markets” of Co-operation Department of Government of Karnataka has also been selected under the Category ‘Innovation in Public Service Management’.** This initiative has also been awarded the overall Gold Award for CAPAM Awards, 2018.

## ALLAHABAD NAMED ‘PRAYAGRAJ’

Uttar Pradesh Government finally changed the name of Allahabad as **“Prayagraj”**, claiming that they have not changed the name and have instead given back the city its 500-years-old original name. The decision was taken at the cabinet meeting chaired by Uttar Pradesh Chief Minister Yogi Adityanath this 16 October 2018 in Lucknow.

What

1. The name change would not be limited to just the city and soon famous Allahabad University and even Allahabad High Court, Railway Station, are also likely to see the name change as Prayagraj, along with many other institutions.
2. The proposal came regarding change of name of Kumbh to Prayagraj seeking approval.
3. **Explaining the name change, The government said, “There are 14 Prayags in the country, in which Allahabad is supreme thus the prayag here has been termed as Prayagraj”.**

## IITS DOMINATE INDIAN UNIVERSITY RANKINGS

The Indian Institutes of Technology (IITs) dominate the first-ever standalone ranking of India’s higher education institutions released by a UK-headquartered think tank. IIT Bombay tops the ‘QS India University Rankings’, with IITs Madras (3), Delhi (4), Kharagpur (5), Kanpur (6), Roorkee (9) and Guwahati (10) grabbing seven of the top 10 slots.

What

1. Indian Institute of Science (IISc) in Bangalore comes in at second, with University of Hyderabad and University of Delhi among the others making a top-10 mark at seventh and eighth respectively in the list released by QS Quacquarelli Symonds.
2. The results reveal that research productivity at leading Indian institutions is increasing and the impact of such research is gradually rising.
3. They also enjoy a good standing with employers while they achieve less recognition with their international academic peers, perhaps suggesting the need to intensify regional and global collaborations.
4. QS Quacquarelli Symonds describes itself as a global higher education (HE) think tank responsible for the world's most-consulted world university rankings.
5. Its first-ever Indian edition of the rankings is designed to offer an independent analysis of the performance of Indian institutions.
6. The rankings include Public Universities, Private Universities and HE Institutions or Deemed Universities. Single faculty specialist institutions or single level institutions (eg. teaching principally at post-graduate level) are not included.
7. According to the analysis, 20 Indian institutions receive full marks in the "Staff with PhD" category, the indicator designed to identify the extent to which institutions are cultivating a highly-qualified faculty body. In the research productivity indicator, nine institutions achieve a score between 98.4 and 100.
8. IIT Bombay, Madras, Delhi, Kharagpur, Kanpur and the University of Delhi enjoy "outstanding regard" among the nearly 43,000 international employers surveyed, while IIT Bombay, IIT Delhi and the IISc Bangalore were the most voted by 83,000+ international academics polled.
9. On a metric-by-metric basis, other institutions that stand out for QS include the Institute of Chemical Technology Mumbai, which achieves the highest score of the QS' indicator of research impact, adjusted for faculty size.
10. It is followed by Shivaji University, Kolhapur and Tamil Nadu Agricultural University Coimbatore achieving the perfect score in the Faculty/Student indicator.

## ONLY INDIAN FIRM IN FORBES

Engineering and construction major Larsen & Toubro (L&T), which is majority owned by its employees, is the only domestic firm to be featured among the top 25 **companies in the Forbes' global 2000 best employers list** that is led by Google parent Alphabet. While L&T is ranked 22, there are only four domestic firms in the top 100 list which include Mahindra & Mahindra at 55, Grasim Industries at 59 and HDFC at 91, and only 24 domestic companies in the overall list, according to the US magazine.

What

1. While for the second year in a row, Alphabet tops the list, at the second slot is Microsoft, and American companies account for six of the top 10 spots.
2. There are only 24 domestic companies in the list which include the state-run GIC Re ranked 106, tobacco major ITC at 108, state-run alloy major SAIL at 139, Sun Pharma at 172, Asian Paints at 179, and HDFC Bank at 183.
3. The ranking is based on the feedback on the likelihood of an employee recommending his/her employer to a friend or family member.
4. This list is based on **Forbes' 2018 global 2000 rankings, which includes publicly traded companies from 60 countries that together accounted for \$39.1 trillion in sales, \$3.2 trillion in profit, \$189 trillion in assets, and \$56.8 trillion in market value, the magazine said.**
5. Besides Alphabet and Microsoft, the top 10 include Apple at the third slot, Walt Disney Company (No. 4), Amazon (No. 5), and Celgene Corporation (No. 9).

6. American companies dominate the list in general. Of the top 500 employers, 185 are in the list, while 80 are in the list from China and Hong Kong.
7. This year, German companies are the second-most represented in the top 10. Auto Company Daimler ranks seventh, and BMW scores the 10th spot.

#### N D TIWARI DIES

Veteran politician N D Tiwari, died in Delhi on 18 October 2018. Tiwari was ailing for a long time and undergoing treatment at Max Super Speciality Hospital since September last year after a brain stroke. He lost the Lok Sabha election by only 800 votes in 1991, and P V Narasimha Rao became Prime Minister after the assassination of Rajiv Gandhi.

What

1. He was Chief Minister of Uttar Pradesh multiple times — from January 1976 to April 1977, from August 1984 to September 1985 and from June 1988 to December 1988.
2. He was elected to the Lok Sabha in 1980 and Rajya Sabha in 1985, and, as Union minister, held a variety of portfolios.
3. He was Chief Minister of Uttarakhand from 2002 to 2007 and Governor of Andhra Pradesh from 2007 to 2009.
4. He was first elected to the UP Assembly on a Praja Samajwadi Party ticket from Nainital in 1952 and 1957. He joined the Congress in 1963 and elected to the UP Assembly from Kashipur in 1965. He was the first president of the Youth Congress in 1969.

#### INTERNATIONAL ARYA MAHASAMMELAN 2018

The President of India, Shri Ram Nath Kovind, inaugurated the International Arya Mahasammelan – 2018 on October 25, 2018 in Delhi. Speaking on the occasion, the President said that in the 19th century when we were considering our culture and beliefs inferior than the western culture, Swami Dayanand Saraswati showed us the path of renaissance and self-pride.

What

1. The Mahasammelan discuss on the issues such as prevention of superstition, modernization, women empowerment, tribal welfare, and management of natural calamities.
2. The Arya Samaj will also work to promote the use of solar and other alternative sources of energy to contribute towards environmental protection.
3. The President said that we will be celebrating 200th birth anniversary of Swami DayanandSaraswati in 2024. We will also celebrate the 150th anniversary of the Arya Samaj in 2025.
4. Swami DayanandSaraswati had worked for eradication of discrimination in society on the basis of caste, creed and sect and motivated everyone to become Arya – that is - the best. It is our duty to take the work of Swami Dayanand Saraswati further.

#### KERALA'S FLOOD REPORT

**A report prepared on this year's Kerala floods** by an investigating committee from **Jawaharlal Nehru University's Special Centre for Disaster Research**, in collaboration with the National Institute for Disaster Management, identified several points of governmental failure that ostensibly contributed to the devastating magnitude of the flood and its consequent destruction. The team, comprising four research scholars from the department, **including the centre's chairperson** Dr Amita Singh, visited four of the worst affected districts – Alappuzha, Idukki, Kottayam and Pathanamthitta – which together cover 20 talukas.

What

1. **The committee's report found that although the Kerala State Disaster Management Authority (KSDMA) had been constituted in 2007, as mandated by the Disaster Management Act, 2005, it came up with only one disaster**

management plan in 2013, which was only approved by the chief minister and had already become redundant.

2. **The report stated, “The plan was to be updated every year but with zonation maps, landslides assessments and other estimated impact studies on risks made in 2010, the plan is outdated.”**
3. The report states that as a result of this, vulnerability mapping was outdated and preparedness and participatory dissemination were missing.
4. The other major point the report flags is the lapses in dam management and late release of water from dams despite repeated warnings from the India Meteorological Department (IMD) about above-normal rainfall over the “extreme south peninsula” between August 9 and 15.
5. **The report stated, “The dam safety authority during its press brief on August 7 defied any plan to open the dams and exactly one week later, when the rainfall was at its highest and people were already facing a highly water saturated ground, the authorities opened all 38 big dams in Kerala together”.**
6. The report mentions that while the state government held three meetings with panchayat pramukhs in Idukki between July 18 and August 10, the pramukhs stated that the officials were unresponsive to their repeated demands for floodgates to be opened earlier, and also opened gradually. They reported that KSDMA never held workshops with them, and that early warnings were not issued.
7. The report also flagged that Fragile Land Act, 2003, was “dumped as outdated law which has lost its relevance” throwing open the Western Ghats for construction, while “river catchments, backwaters and estuaries providing mangroves...are subsequently eliminated”.