



**CENTRE FOR AMBITION**  
(An Institute for Civil Services)

## BACK GROUNDER JUNE-2017

### ADB AND PNB SIGN \$100 MILLION LOAN TO FINANCE SOLAR ROOFTOP PROJECTS

The Asian Development Bank (ADB) and the Punjab National Bank (PNB) have signed a \$100 million loan — to be guaranteed by the Government of India — that will finance large solar rooftop systems on industrial and commercial buildings throughout India. The PNB will use the ADB funds to make further loans to various developers and end users to install rooftop solar systems.

- This is the first tranche loan of the \$500 million multi tranche finance facility Solar Rooftop Investment Program (SRIP) approved by ADB in 2016. The financing includes \$330 million from ADB's ordinary capital resources and \$170 million from the multi donor Clean Technology Fund (CTF) administered by ADB. The first tranche loan of \$100 million would be financed entirely from the CTF.

#### Background:

The entire Solar Rooftop Investment Program will cost \$1 billion, inclusive of ADB \$500 million funding, and the projects financed under the program will install solar rooftop system of around 1 GW capacity. This will contribute to the climate change goal of reducing greenhouse gas emissions by about 11 million tons of carbon dioxide equivalent over the typical 25-year lifetime of rooftop solar systems. The project is aligned with **the goal set by Government of India to increase the country's solar rooftop capacity by 40 GW by 2022.**

#### Know about ADB:

ADB, based in Manila, is dedicated to reducing poverty in Asia and the Pacific through inclusive economic growth, environmentally sustainable growth, and regional integration. Established in 1966, it is owned by 67 members – 48 from the region.

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

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

- ADB focuses on five core areas of operations: infrastructure; the environment, including climate change; regional cooperation and integration; finance sector development; and education.

### INDIA IS NO LONGER THE FASTEST-GROWING ECONOMY

According to the latest data, India lost its fastest-growing major economy tag in the fourth quarter of 2016-17, with GDP growth coming in at 6.1% compared with China's 6.9% in the same period.

#### Key facts:

- GDP of India grew 7.1% in the financial year 2016-17, slower than the 8% registered in 2015-16. Gross value added (GVA) growth was 6.6% for 2016-17 and 5.6% in the fourth quarter, compared with 7.9% in 2015-16 and 8.7% in Q4 of that year.
- The data indicate that post-demonetisation there has been a slowdown. The GDP growth rate is slightly higher (than GVA growth) because of a more than proportionate increase in indirect tax net of subsidies. But the GDP also shows a reduction in Q3 and Q4 numbers compared with the beginning of the year. So demonetisation has clearly had a tangible and adverse impact.
- Looking deeper, GVA growth slowed in almost every sector in Q4 of 2016-17 compared to the growth witnessed in the corresponding period of the previous year.

### PLAN FOR INDIAN SEZs IN BANGLADESH HITS BUMP

India's plan to step up investments in Bangladesh by setting up three mega Special Economic Zones (SEZ) exclusively for Indian companies in the latter's territory has hit a major hurdle.

**What's the issue?**

Indian companies have cited various constraints including inadequate infrastructure and lack of uninterrupted power supply” at Mongla, Bheramara and Mirsarai – the sites in Bangladesh for the proposed Indian SEZs. For better connectivity and business prospects, they sought alternative sites close to the Chittagong Port and the capital city of Dhaka — similar to those been allocated by Bangladesh for Chinese SEZs.

**Background:**

India and Bangladesh had inked a Memorandum of Understanding (MoU) in June 2015 — during Prime Minister Narendra Modi’s visit to Bangladesh — for cooperation on establishing Indian SEZs in Bangladesh.

The plan was to develop Indian SEZs at Mirsarai (1,005 acres), Bheramara (about 480 acres) and Mongla (200 acres). The construction of these SEZs and Indian investment in the zones were to be facilitated through concessional Line of Credit extended by India to Bangladesh.

**What is a SEZ?**

A Special Economic Zone (SEZ) is a geographical region that has economic laws more liberal than a country’s typical economic laws. They are established with an aim to purport development , promote rapid economic growth by providing tax and business incentives for attracting foreign technology along with investment. These are not merely SEZ’s but may be called as “favorite Investment destinations” for foreign establishments. Such units would be future sources of employment, hubs of latest technologies and equipped with the best infrastructure.

The incentives and facilities offered to the units in SEZs for attracting investments into the SEZs, including foreign investment include:

- Duty free import/domestic procurement of goods for development, operation and maintenance of SEZ units
- 100% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years.
- Exemption from minimum alternate tax.

- External commercial borrowing by SEZ units upto US \$ 500 million in a year without any maturity restriction through recognized banking channels.
- Exemption from Central Sales Tax.
- Exemption from Service Tax.
- Single window clearance for Central and State level approvals.
- Exemption from State sales tax and other levies as extended by the respective State Governments.

**FIRST SCORPENE SUBMARINE KALVARI TO BE COMMISSIONED BY JULY**

The first of the six Scorpene submarines- Kalvari, being built in India under technology transfer is likely to join the Navy by end of July. Kalvari is going through its final phase of trials.

**What you need to know about INS Kalvari?**

Kalvari is named after a deep-sea tiger shark. The Scorpene is part of the ambitious Project 75 of Indian Navy’s submarine programme.

- This type of submarine is designed to operate in all theatres including the Tropics. It can undertake various types of missions that are undertaken by any modern submarine including anti-surface warfare, anti-submarine warfare, mine laying, intelligence gathering, surveillance, etc.
- With its superior stealth capability, it can launch a crippling attack on the enemy using precision guided weapons. The attack can be launched with torpedoes, as well as tube launched anti-ship missiles, whilst underwater or on surface.

**Background:**

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

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## PREVENTIVE DETENTION NO QUICK FIX

Supreme Court of India, in a case, has observed that preventive detention of a person by a State after branding him a 'goonda' merely because the normal legal process is ineffective and time-consuming in 'curbing the evil he spreads' is illegal.

- The judgment dealt with the case of a seed manufacturer in Telangana who was taken into preventive detention by the authorities on the allegation that he is selling spurious chilli seeds to poor farmers.

### Important observations made by the court:

- Detention of a person was a serious matter affecting the liberty of the citizen. Hence, preventive detention cannot be resorted to when sufficient remedies are available under the general laws of the land for any omission or commission under such laws.
- The order of preventive detention, though based on the subjective satisfaction of the detaining authority, is nonetheless a serious matter, affecting the life and liberty of the citizen under Articles 14, 19, 21 and 22 of the Constitution. The power being statutory in nature, its exercise has to be within the limitations of the statute, and must be exercised for the purpose the power is conferred.
- If the power is misused, or abused for collateral purposes, and is based on grounds beyond the statute, takes into consideration extraneous or irrelevant materials, it will stand vitiated as being in colourable exercise of power.

### What you need to know about preventive detention?

Preventive Detention is the most contentious part of the scheme fundamental rights in the Indian constitutions. The Article 22 (3) of the Indian constitution provides that if a person is arrested or detained under a law providing for preventive detention, then the protection against arrest and detention under Article 22 (1) and 22 (2) shall not be available.

### The grounds for Preventive detention are:

- Security of state.
- Maintenance of public order.
- Maintenance of supplies and essential services and defence.

- Foreign affairs or security of India.

### SPARROW-ITS:

- Smart Performance Appraisal Report Recording Online Window was recently to enable the Indian Trade Service (ITS) officers to fill their Annual Performance Appraisal Report (APAR) online for the year 2016-17 onwards.
- The APARs would be generated and transmitted online to the concerned officers for filling up of the self appraisal. The officer can then submit the self appraisal online through Digitally Signed Signature (DSC) or through E-sign.
- The subsequent processes of reporting and reviewing would also be done online by the Reporting and Reviewing Officer by using DSC or E-sign. The timelines have been drawn up for each stage of the process. The entire process of filling up of APAR would have to be completed by 31st December and no remarks can be added after that date.

### BETI BACHAO BETI PADHAO: INFORMATION FOR ALL

Ministry of Women & Child Development (MWCD) has issued a clarification note stating that **the BBBP scheme has no provision for individual CASH TRANSFER COMPONENT by Government of India.**

- Beti Bachao Beti Padhao scheme focuses on challenging mindsets and deep rooted patriarchy in the societal system, strict enforcement of PC&PNDT Act, advancing education of the girl child: focus is on issues of women empowerment on a life cycle continuum. It is not a DBT (Direct Benefit Transfer) scheme.

### What you need to know about BBBP?

Beti Bachao Beti Padhao (BBBP) Scheme was launched in January, 2015 at Panipat in Haryana.

- The scheme is aimed at promoting gender equality and the significance of educating girls.
- The Scheme is targeted at improving the Child Sex Ratio through multi sectoral interventions including prevention of gender biased sex selection and promoting girls' education and her holistic empowerment.

- It is a **tri-ministerial effort** of Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development.
- In the first phase, 100 districts with low Child Sex Ratio were selected for the Scheme implementation for creating awareness and advocacy about the issue.

#### APQN QUALITY AWARD TO NAAC

National Assessment and Accreditation Council (NAAC) of India has received prestigious International Award of Asia Pacific Quality Network (APQN) titled “APQN Quality Award 2017 for International Co-operation in Quality Assurance.”

- APQN Quality Award are among the most prestigious International Awards in quality assurance of higher education.

#### What you need to know about NAAC?

The National Assessment and Accreditation Council (NAAC) is an organisation that assesses and accredits institutions of higher education in India. It is an **autonomous body funded by University Grants Commission** of Government of India headquartered in Bangalore. NAAC was established in 1994 in response to recommendations of National Policy in Education (1986).

#### MIT'S Mega Food Park at Rayagada, Odisha

The **first Mega Food Park in the state of Odisha M/s MIT'S Mega Food Park Pvt. Ltd. Was recently inaugurated at Rayagada.** This is the 7th Mega Food Park operationalized in the last 3 years by the present government.

#### What you need to know about these mega food parks?

To give a major boost to the food processing sector by adding value and reducing food wastage at each stage of the supply chain with particular focus on perishables, **Ministry of Food Processing Industries is implementing Mega Food Park Scheme in the country.**

The Scheme of Mega Food Park aims at providing a mechanism to link agricultural production to the market by bringing together farmers, processors and retailers so as to ensure maximizing value addition, minimizing wastages, increasing farmers' income and creating employment opportunities particularly in rural sector.

#### What these food parks provide?

They facilitate the efforts to increase the level of processing of agricultural and horticultural produce, with particular focus on perishables, in the country and thereby to check the wastage.

#### Mode of operation:

- The Scheme has a **cluster based approach** based on a hub and spokes model. It includes creation of infrastructure for primary processing and storage near the farm in the form of Primary Processing Centres (PPCs) and Collection Centres (CCs) and common facilities and enabling infrastructure at Central Processing Centre (CPC).
- The PPCs are meant for functioning as a link between the producers and processors for supply of raw material to the Central Processing Centres.
- CPC has need based core processing facilities and basic enabling infrastructure to be used by the food processing units setup at the CPC. The minimum area required for a CPC is 50 acres.
- The scheme is demand-driven and would facilitate food processing units to meet environmental, safety and social standards.

#### IMPLEMENTATION AND FINANCIAL ASSISTANCE:

Mega Food Park project is implemented by a Special Purpose Vehicle (SPV) which is a Body Corporate registered under the Companies Act. State Government/State Government entities/Cooperatives applying for setting up a project under the scheme are not required to form a separate SPV.

The financial assistance for Mega Food Park is provided in the form of grant-in-aid at 50% of eligible project cost in general areas and at 75% of eligible project cost in NE Region and difficult areas (Hilly States and ITDP areas) subject to maximum of Rs. 50 crore per project.

#### RAJASTHAN LEADS IN CHILD MARRIAGES

The report of a study conducted on child marriages by Young Lives in coordination with the National Commission for Protection of Child Rights (NCPCR) has been released.

**Highlights of the report:**

- Rajasthan has reported the highest incidence of child marriages in the country. 2.5% of marriages of minor girls were reported in Rajasthan.
- Rajasthan is followed by 15 States, including Meghalaya, Arunachal Pradesh, Bihar, Uttar Pradesh, Gujarat, Sikkim, Madhya Pradesh, West Bengal, Nagaland, Assam, Maharashtra, Tripura, Dadra & Nagar Haveli and Karnataka.
- Rajasthan also topped in the percentage (4.69%) of boys marrying below the legal age of 21 years. Thirteen other States reported a higher percentage of child marriages among boys when compared with the national average.
- No marriage below 10 years of age was reported across the country.
- Across the country, 12.9% of girls got married in the age of 10-17 years and 43.6% between 18-20 years. However, only 4.9% of boys got married in the 10-17 years age group and 11.2% in the 18-below 21 age group.
- There is a minor decline of 0.1% in the marriage of minor girls. The decline in rural India, between 2001 and 2011 Census, was marginally higher than in the whole of the country. However, the incidence of child marriage among girls increased substantially in urban India from 1.78% in 2001 to 2.45% in 2011. The absolute number of girls married below legal age was 5.1 million.

**Background:**

The study is based on the 2011 Census. The study zeroes in on 70 districts spread across 13 States, which comprise more than 20% of child marriages. It has empirically studied the current situation vis-à-vis various possible factors.

**INDIA, RUSSIA INK NUCLEAR PLANT PACT**

India and Russia have signed the much-awaited agreement on setting up two more units of Kudankulam Nuclear Power Plant (KKNPP) in Tamil Nadu.

**Background:**

PM Modi and Putin had come to an agreement in 2015. Under that agreement, the deal for building unit 5 and unit 6 of nuclear reactors at the plant was supposed to be

inked in 2016. The deal ran into a hurdle with regard to the line of credit that was to be extended by Russia.

**What's the issue?**

The KKNPP was the result of an inter-government agreement between India and the erstwhile Soviet Union in 1988. During the same period, two other similar proposals were defeated as protest stymied government's plans to build plants in Peringome near Kannur and Bhoothathankettu in Ernakulam, both districts in Kerala.

KKNPP ran into hurdles as protests stopped the government from moving ahead with the project. However, slowly the government has managed to take the project ahead. Over the years, four reactor units were built and operationalised. The plant though didn't yield promised power during warranty testings. Its generation was only about 52%.

**What next?**

The last two reactor units will be built and installed jointly by the Nuclear Power Corporation of India Ltd and Atomstroyexport. The latter is a subsidiary of Rosatom—regulatory body of Russian nuclear complex. Each of the units will have a power generation capacity of 1,000 MW.

**About Kudankulam Nuclear Power Plant:**

Kudankulam Nuclear Power Plant is situated in Koodankulam in the Tirunelveli district of the southern Indian state of Tamil Nadu.

- The reactors are pressurised water reactor of Russian design. Thermal capacity is 3,000 MW, gross electrical capacity is 1,000 MW with a net capacity of 917 MW.
- When completed the plant will become the largest nuclear power generation complex in India producing a cumulative 2 GW of electric power.

**PRESSURIZED WATER REACTORS (PWRs):**

They are one of three types of light water reactor (LWR), the other types being boiling water reactors (BWRs) and supercritical water reactors (SCWRs). In a PWR, the primary coolant (water) is pumped under high pressure to the reactor core where it is heated by the energy released by the fission of atoms. The heated water then flows to a steam generator where it transfers its thermal energy to a

secondary system where steam is generated and flows to turbines which, in turn, spin an electric generator. In contrast to a boiling water reactor, pressure in the primary coolant loop prevents the water from boiling within the reactor. All LWRs use ordinary water as both coolant and neutron moderator.

### INVESTMENT PACT SYSTEM NEEDS REVIEW

Experts have stressed the need for review and reform of the system of International Investment Agreements (IIA) — including the Investor-State Dispute Settlement (ISDS) mechanism.

#### Need for reforms:

Reforms are necessary because the IIA system currently has a pro-investor bias — with an aim to protect only capital and not labour, indigenous people, migrants, or consumers, all of whom have linkages with investment.

Also, the current ISDS mechanism, which is ad hoc, unpredictable and often arbitrary, needs urgent review as the current ISDS regime can be quite costly for host countries.

#### Background:

The pitch for reforming the IIA system assumes significance as India, along with countries including South Africa, had recently opposed efforts by nations including China, Brazil, Australia and South Korea to begin discussions on a proposal for an investment facilitation agreement at the World Trade Organisation (WTO)-level that reportedly seeks to incorporate provisions including the controversial ISDS mechanism.

#### What you need to know about IIA?

An International Investment Agreement (IIA) is a type of treaty between countries that addresses issues relevant to cross-border investments, usually for the purpose of protection, promotion and liberalization of such investments. Most IIAs cover foreign direct investment (FDI) and portfolio investment, but some exclude the latter.

- Countries concluding IIAs commit themselves to adhere to specific standards on the treatment of foreign investments within their territory. IIAs further define procedures for the resolution of disputes should these commitments not be met.

- The most common types of IIAs are Bilateral Investment Treaties (BITs) and Preferential Trade and Investment Agreements (PTIAs). International Taxation Agreements and Double Taxation Treaties (DTTs) are also considered as IIAs, as taxation commonly has an important impact on foreign investment.

- Countries conclude IIAs primarily for the protection and, indirectly, promotion of foreign investment, and increasingly also for the purpose of liberalization of such investment. IIAs offer companies and individuals from contracting parties increased security and certainty under international law when they invest or set up a business in other countries party to the agreement. The reduction of the investment risk flowing from an IIA is meant to encourage companies and individuals to invest in the country that concluded the IIA.

### THIRD GRAVITATIONAL WAVE MERGER DETECTED

The Laser Interferometer Gravitational-wave Observatory (LIGO) detectors in the U.S. have detected yet another merger of two black holes.

#### Key facts:

- Named GW170104, this signal marks the third confirmed detection of gravitational waves coming from a binary black hole merger.
- It is of great interest to the scientific community that the black holes, having masses nearly 31 times and 19 times the sun's mass. Until the first detection of gravitational waves by LIGO in 2015 (GW150914) it was not known that such massive black holes could exist.
- The latest detection has revealed not merely a black-hole merger but also the alignment of the spins of the black holes. This can shed light on the way the black holes might have formed. In this event, the spins of the individual black holes making up the merger are probably not aligned along the same direction. This supports **the theory which says that black holes form independently in a star cluster, then sink to the centre of the cluster and eventually merge.**
- The observation **also supports Einstein's General Theory of Relativity**. According to this theory, gravitational waves, unlike light waves, will not disperse as they travel through

space. This, too, has been confirmed by the analysis of the latest signal.

### What are Gravitational Waves?

Gravitational waves are the ripples in the pond of spacetime. The gravity of large objects warps space and time, or “spacetime” as physicists call it, the way a bowling ball changes the shape of a trampoline as it rolls around on it. Smaller objects will move differently as a result – like marbles spiraling toward a bowling-ball-sized dent in a trampoline instead of sitting on a flat surface.

### Why they are useful?

These waves will be particularly useful for studying black holes (the existence of which was first implied by Einstein’s theory) and other dark objects, because they’ll give scientists a bright beacon to search for even when objects don’t emit actual light.

- With this, mapping the abundance of black holes and frequency of their mergers could get a lot easier.
- Since they pass through matter without interacting with it, gravitational waves would come to Earth carrying undistorted information about their origin.
- They could also improve methods for estimating the distances to other galaxies.

### Why it is difficult to detect these waves?

The reason that gravitational waves have been so difficult to detect is that their effects are tinier than tiny. In fact, the signals they produce are so small that scientists struggle to remove enough background noise to confirm them.

### INAM-Pro+:

It is a Web Platform for Sale and Purchase of Construction Material and Service launched recently by the Ministry of Road Transport & Highways and Shipping. INAM-Pro+ is an upgraded version of INAM-Pro, the web portal designed by National Highways and Infrastructure Development Corporation Ltd (NHIDCL).

INAM-Pro+ to include the A to Z of construction materials, equipments/machinery and services like purchase/hiring/lease of new/used products and services in the domains of Construction Materials viz, cement, steel, bitumen, stone

aggregates, concrete, bricks, wood, sanitary items, paint etc.

### NEW CEO OF PRASAR BHARATI

Shri Shashi Shekar Vempati has been appointed as the Chief Executive Officer (CEO) of Prasar Bharati for a period of five years from the date of assumption of office.

**Appointment:** The appointment was made on the recommendation of **the three member committee headed by the Hon’ble Vice President**, and consisting of Chairman, Press Council of India and the President’s nominee i.e. Secretary, Information and Broadcasting.

### What you need to know about Prasar Bharati?

Prasar Bharati is a **statutory autonomous body established under the Prasar Bharati Act** and came into existence on 23.11.1997. It is the Public Service Broadcaster of the country. The objectives of public service broadcasting are achieved in terms of Prasar Bharati Act through All India Radio and Doordarshan.

### SMARTGRAM Initiative

The President of India, Shri Pranab Mukherjee recently laid the foundation stone of a Driver’s Training Institute and a Secondary School under the SMARTGRAM Initiative at village Dhaula, Gurugram (Haryana).

### What you need to know about SMARTGRAM initiative?

It is an **initiative of Rashtrapati Bhavan**. Under the project the selected villages will see new ventures in agriculture, skill development, energy, education, health, employment generation, and entrepreneurship.

- The model is based on the convergence of resources and effort by the central government, state government, district administration, panchayati raj institutions, public sector, private sector and enlightened villagers to enhance the environment, connectivity and wellbeing of each village.
- A ‘smart gram’, according to the project, would have the required basic physical and social infrastructure with a layer of smart information and communication embedded to improve governance and delivery of services, livelihood and economic opportunities.

## PRITHVI-II MISSILE SUCCESSFULLY TEST-FIRED

Prithvi-II missile was recently successfully test-fired in Odisha by the Army.

### About the Missile:

- Prithvi-II is indigenously developed and is nuclear-capable surface-to-surface
- The missile is capable of carrying warheads weighing 500 kg to 1,000 kg.
- With a strike range of 350 km, Prithvi-II is powered by twin-engines which use liquid propulsion.
- It also uses advanced inertial guidance system with manoeuvring trajectory to hit its target.
- **Notably, Prithvi is India's first indigenously-built ballistic missile.** It is one of the five missiles being developed under the country's **Integrated Guided Missile Development Programme.**

## US EXIT FROM PARIS CLIMATE DEAL

The United States will be withdrawing from the Paris climate agreement, President Donald Trump announced recently. He said this move was aimed at protecting American and its citizens. The US is the second-largest emitter of greenhouse gases in the world, right behind China.

- The withdrawal process takes four years. But when it's complete, the United States will join a lonely club. Just **two other countries — Syria and Nicaragua — have rejected the nonbinding agreement.**

### Know about the Paris agreement:

The Paris agreement, signed in 2015 by 195 countries, does four simple things.

- It sets a global goal of keeping global average temperatures from rising 2°C (compared to temperatures pre-Industrial Revolution) by the end of the century.
- It sets a **nonbinding agreement** for countries to reach peak greenhouse gas emissions "as soon as possible."
- It adds a framework for countries to become more aggressive in reaching those goals over time. In 2020,

delegates are supposed to reconvene and provide updates about their emission pledges, and report on how they're becoming more aggressive on accomplishing the 2 degree goal.

- It asks richer countries to help out poorer countries: to give them capital to invest in green technologies, but also to help them brace for a changing world.

### Why Trump is against this deal?

Trump says the Paris deal unfairly puts constraints on the United States coal industry, and unfairly allows some countries to continue to pollute at a greater rate than others.

### Implications of this move:

In diplomatic and moral terms, the withdrawal represents a wilful abdication of America's leadership role in the world. And as a business mistake, the decision means the U.S. will miss out on some the \$1.4 trillion global business opportunity that the global low-carbon economy represents.

### Is climate change real?

The temperature of Earth's air and the quantity of heat trapped in its oceans continue to grow, with 2016 declared the hottest year on record.

- Climate change could lead to political instability, increased societal tensions and could place new burdens on economies and governments. Large numbers of people will likely be displaced due to famine and drought.
- A NASA-funded study said that global industrial civilisation is headed for a collapse in the coming decades, blaming unsustainable resource use and increasing wealth inequality.

## STATE BANK MAY OPT FOR QIP

The State Bank of India is planning to complete a planned share sale by year-end, probably through a qualified institutional placement (QIP).

### What is a QIP?

A QIP is a capital raising tool wherein a listed company can issue equity shares, fully and partly convertible debentures, or any security (other than warrants) that is

convertible to equity shares. Apart from preferential allotment, this is the only other speedy method of private placement whereby a listed company can issue shares or convertible securities to a select group of investors. But unlike in an IPO or an FPO (further public offer), only institutions or qualified institutional buyers (QIBs) can participate in a QIP issuance. QIBs include mutual funds, domestic financial institutions such as banks and insurance companies, venture capital funds, foreign institutional investors, and others.

There are a few rules to follow. The market regulator has stated that there should be at least two QIBs if the issue size is less than Rs.250 crore, and at least five investors if the size is more than Rs.250 crore. A single investor cannot be allotted more than 50% of the issue.

### How is the price decided?

The QIP will be priced not less than the average of the weekly high and low of the closing prices of the equity shares during the two weeks preceding the “relevant” date. The “relevant” date will be the opening date of the issue, as decided by the company’s board. In a rising market, such as now, the QIP price is set at an attractive rate.

### Why QIP?

For the issuing company, QIPs are less cumbersome than IPOs and FPOs. It doesn’t have to file a pre-issue document with the capital markets regulator, and only a placement document with the stock exchanges, which only has details of the issue.

- QIP is also a less expensive mode of raising capital than, say, an IPO, FPO or rights issue.
- For the QIBs, unlike in an IPO where an anchor investor has to stay invested for a month, there are no such restrictions with QIPs.

### INDIA HAS 31% OF WORLD’S POOR KIDS: REPORT

About 31% of the world’s “multidimensionally poor” children live in India, according to a new report by the Oxford Poverty and Human Development Initiative (OPHI). OPHI is an economic research centre at the Oxford University and the study is based on a survey conducted among 103 countries.

### What makes a child multidimensionally poor?

A “multidimensionally poor” child is one who lacks at least one-third of ten indicators, grouped into three dimensions of poverty: health, education and standard of living. The health dimension comprises indicators such as nutrition, child mortality, and education. Under standard of living are indicators such as access to cooking fuel, improved sanitation, safe drinking water, electricity, flooring, and asset ownership.

### Performance of India:

- In terms of countries, fully 31% of the 689 million poor children live in India, followed by Nigeria (8%), Ethiopia (7%) and Pakistan (6%).
- In terms of the number of multidimensionally poor children as a proportion of the total population, India stood 37th among 103 countries. Out of India’s 217 million (21.7 crore) children, 49.9% were multidimensionally poor.
- In terms of absolute numbers, India accounts for both the highest and a staggering number of multi-dimensionally poor people. More than 528 million (52.8 crore) Indians are poor, which is more people than all the poor people living in Sub-Saharan Africa combined.

### Global scenario:

- Nearly 50% of the children in 103 countries were multidimensionally poor. Of the 1.45 billion (145 crore) people (from the 103 countries) who are multidimensionally poor; 48% are children. That is a total of 689 million (68.9 crore) children who live in multidimensional poverty.
- 87% of the multidimensionally poor children lived in South Asia (44%) and Sub-Saharan Africa (43%). In Ethiopia, Niger, and South Sudan, over 90 % of the children are MPI poor.
- As for the intensity of poverty, the average percentage of deprivation in terms of the 10 MPI categories was highest in Sub-Saharan Africa, where multidimensionally poor children were “simultaneously deprived” in 58% of the indicators. Sub-Saharan Africa was followed by the region described as the Arab States (53%). South Asia occupied the third spot, with children deprived in 49% of the MPI indicators.

**Way ahead:**

This is a wake-up call to the international community which has adopted the global Sustainable Development Goals and takes seriously Goal 1, the eradication of poverty in all its forms and dimensions.

**Tiny Orang roars on tiger density**

According to a survey, Orang tiger reserve in Assam, which has the smallest core, is host to 28 big cats, thus **having the highest density nationally**. The count was revealed during phase IV of the **all-India tiger estimation programme of the National Tiger Conservation Authority (NTCA)**.

**Know about Orang tiger reserve:**

Spread over Darrang and Sonitpur districts and notified in February 2016, **Orang Tiger Reserve is the 49th in the country**. It has the **smallest core** of 78.28 sq. km.

- It is **located on the north bank of the Brahmaputra River**. It is also known as the **mini Kaziranga National Park (IUCN site)** since the two parks have a similar landscape made up of marshes, streams and grasslands.
- The park has a rich flora and fauna, including great Indian one-horned rhinoceros, pigmy hog, elephants, wild buffalo and tigers. It is the only stronghold of rhinoceros on the north bank of the Brahmaputra river.

**About NTCA:**

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

The National Tiger Conservation Authority has been fulfilling its mandate within the ambit of the Wildlife (Protection) Act, 1972 for strengthening tiger conservation in the country by retaining an oversight through advisories/normative guidelines, based on appraisal of tiger status, ongoing conservation initiatives and recommendations of specially constituted Committees.

**CSIR FACES FUND CRUNCH, ASKS LABS TO LOOK OUTSIDE**

The Council of Scientific and Industrial Research is staring at a fund crunch this year. Hence, CSIR's chief has asked the directors of all of the organisation's 38 labs to look outside of the CSIR to meet their expenses.

**Background:**

In any given year, the CSIR— with a <sup>1</sup> 4,000 crore annual budget — apports out about <sup>1</sup> 1,200-1,400 crore to its labs for research. This year only about <sup>1</sup> 360 crore would be available. Pay panel and pension payouts along with scrapping of plan panel's block grants has crippled the scientific organisation.

**Know about CSIR:**

It was established as **an autonomous body** that has emerged as the largest research and development organisation in India.

- It runs several laboratories and field stations or extension centres throughout the nation, with a collective staff of over 17,000 workers.
- Although it is mainly funded by the Ministry of Science and Technology, it operates as an autonomous body through the Societies Registration Act, 1860.
- The research and development activities of CSIR include aerospace engineering, structural engineering, ocean sciences, life sciences, metallurgy, chemicals, mining, food, petroleum, leather, and environmental science.

**INDIA MAJOR DEFENCE PARTNER: U.S.**

Defence Secretary James Mattis recently said that the U.S. recognises India as a major defence partner partly out of respect for New Delhi's indispensable role in maintaining stability in the Indian Ocean.

**MAJOR DEFENCE PARTNER:**

In a significant development, the US recognised India as a "major defence partner" in June 2016, which means that for defence related trade and technology transfer the country would now be treated at par with America's closest allies.

So, what does it mean to be a “major defence partner” partner of the US?

Under the ‘major defence partner’ recognition, the US will continue to work toward facilitating technology sharing with India to a level commensurate with that of its closest allies and partners.

It “institutionalises the progress made to facilitate defence trade and technology-sharing with India to a level at par with that of the United States’ closest allies and partners, and ensures enduring cooperation into the future.

#### **AADHAAR MUST FOR ATAL PENSION YOJANA**

Aadhaar has now been made mandatory to get benefits of the Atal Pension Yojana. Those subscribing to the pension scheme will be required to furnish proof of possession of the unique ID or undergo the enrolment process to get the benefits.

#### **What you need to know about APY?**

The Atal Pension Yojana became operational from June 1, 2015 and is available to all the citizens of India in the age group of 18-40 years.

- Under the scheme, a subscriber would receive a minimum guaranteed pension of Rs 1,000 to Rs 5,000 per month, depending upon his contribution, from the age of 60 years.
- The same pension would be paid to the spouse of the subscriber and on the demise of both the subscriber and the spouse, the accumulated pension wealth is returned to the nominee.
- The Central Government would also co-contribute 50% of the total contribution or Rs. 1000 per annum, whichever is lower, to each eligible subscriber account, for a period of 5 years, that is, from 2015-16 to 2019-20, to those who join the NPS before 31st December, 2015 and who are not members of any statutory social security scheme and who are not Income Tax payers.

#### **CITIZEN SCIENTISTS FIND COLD NEW WORLD NEAR SOLAR SYSTEM**

A brown dwarf over 100 light years away from the Sun has been discovered using a new citizen science tool that helps astronomers pinpoint new worlds lurking in the outer

reaches of our solar system. These sightings were made by the Backyard Worlds volunteers.

#### **Know about Backyard Worlds project:**

The Backyard Worlds project lets anyone with a computer and an Internet connection flip through images taken by NASA’s Wide Field Infrared Survey Explorer (WISE) spacecraft.

- If an object is close enough to Earth, it will appear to “jump” when multiple images taken of the same spot in the sky a few years apart are compared.
- The goal for Backyard Worlds volunteers — of which there are more than 37,000 — is to flag the moving objects they see in these digital flipbooks for further investigation by the science team. So far, volunteers have classified more than 4 million flipbooks.

#### **What are brown dwarfs?**

Brown dwarfs are objects which have a size between that of a giant planet like Jupiter and that of a small star. In fact, most astronomers would classify any object with between 15 times the mass of Jupiter and 75 times the mass of Jupiter to be a brown dwarf. Given that range of masses, the object would not have been able to sustain the fusion of hydrogen like a regular star; thus, many scientists have dubbed brown dwarfs as “failed stars”.

#### **Mazaalai:**

- It is the first university satellite of Mongolia named after the Mongolian endangered Gobi bear – Mazaalai. The satellite has been designed by students.
- It was sent off into space in the United States recently. The satellite accompanied the “SpaceX Falcon 9” rocket. The project under which the satellite was launched is supported by UNESCO and Japan.
- Mongolia will be able to contact the satellite which will be sent off 400km away from the earth 5-6 times a day. A satellite is advantageous for the nation in many ways such as bringing the ability to conduct independent space studies, capture the geographic picture of a country, develop more accurate maps, and better prevent natural disasters.

### **New DG NWDA**

Dr. Sharad Kumar Jain has been appointed as the Director General of National Water Development Agency (NWDA) under Ministry of Water Resources, River Development and Ganga Rejuvenation.

### **Know about NWDA:**

NWDA is the agency of the Union Ministry of Water Resources. It was set up in July, 1982 as **autonomous** society under the Societies Registration Act, 1860.

### **Functions of NWDA:**

- Carry out the water balance and other studies on a scientific and realistic basis for optimum utilisation of Water Resources of the Peninsular rivers system.
- Prepare feasibility reports and give concrete shape to Peninsular Rivers Development Component of National Perspective.
- In 1990, it was also entrusted with the task of Himalayan Rivers Development Component of National Perspectives.
- It has been also entrusted to prepare feasibility reports of intra-State links as proposed by the States.

### **MISSION INNOVATION MINISTERIAL AND CLEAN ENERGY MINISTERIAL**

World's Energy Leaders have gathered in Beijing for second Mission Innovation Ministerial and 8th Clean Energy Ministerial. An Indian delegation led by Dr. Harsh Vardhan, Minister for Science & Technology, Earth Sciences and Environment, Forest & Climate Change will be participating in the conferences.

### **Mission Innovation:**

MI was announced on November 30, 2015 by the leaders of 20 countries that have a shared desire to accelerate global clean energy innovation during COPE 21 in Paris. The 'Mission Innovation' (MI) is an effort to accelerate public and private global clean energy innovation, including through participating countries doubling their respective clean energy research and development investment.

- There is a concerted effort to enhance the pace of innovation and scale of transformation through this clean energy revolution launch to meet the requirement for economic, energy security goals in timely manner.
- India is Founding Member of the Steering Committee and also a Member of the two sub-groups: Joint research and Capacity Building and Private Sector Engagement.

### **Clean Energy:**

The Clean Energy Ministerial (CEM) is a high-level global forum to share lessons learnt and best practices, and to encourage the transition to a global clean energy economy. Initiatives are based on areas of common interest among participating Governments and other stakeholders. The CEM is the initiative of the USA. Presently, 23 countries are members of CEM. There are 13 initiatives under CEM covering energy efficiency, clean energy supply and cross cutting areas.

Since its launch in 2010, the Clean Energy Ministerial (CEM) has come a long way. Its various initiatives were instrumental in leading significant collaborative work amongst members in context of clean energy supply, demand side management and relevant cross cutting issues

### **HANDBOOK, MODULE & GUIDELINES ON SAFE CHILDHOOD PROGRAMME FOR GRAM PANCHAYATS**

A Handbook along with Module & Guidelines on protection of Child Rights at Gram Panchayat level was recently released jointly by National Commission for Protection of Child Rights (NCPCR), Ministry of Panchayati Raj and UNICEF.

- The Handbook, Module & Guidelines will be useful for the functionaries of the Panchayati Raj Institutions in protecting the rights of children at the village level.

### **Significance of this move:**

Safe Childhood Programme will contribute in improving the current scenario related to health, development, education and protection of children. Children are vulnerable and subject to abuse and exploitation in day to day life. To counter it, this Handbook will help Panchayat Members and other stakeholders to understand their role

and actions in protection of children at the village level resulting in better convergence of programmes and increased allocation of resources to address Child Right issues. NCPCR will receive reports on its implementation each month from the 14 States. After one year, the Commission will evaluate the impact and felicitate those States which achieve good results.

### What you need to know about NCPCR?

The National Commission for Protection of Child Rights (NCPCR) was set up in March 2007 under the Commission for Protection of Child Rights Act, 2005.

The Commission's Mandate is to ensure that all Laws, Policies, Programmes, and Administrative Mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child. The Child is defined as a person in the 0 to 18 years age group.

### MoU signed between Central Industrial Security Force & National Skill Development Corporation

The Central Industrial Security Force (CISF), Ministry of Home Affairs and the National Skill Development Corporation (NSDC) & National Skill Development Fund (NSDF), Ministry of Skill Development and Entrepreneurship, have signed a Memorandum of Understanding (MoU).

### Key facts:

- The MoU provides that CISF, NSDC and NSDF shall work together at CISF units all across the country where Family Welfare Centres are functional and other CISF locations with an objective to impart skill development programs under the Skill India Mission for the purpose of implementation of CISF Multi Skill Development Institute Projects.
- The MoU aims at assisting retiring/retired, serving low medical category (LMC) CISF personnel to acquire additional skills and facilitate their resettlement through a second career. It will also provide welfare to wards, family members of serving CISF personnel, retired personnel and personnel killed in action.

- The MoU shall remain in effect for a period of 5 years (starting from 5th June, 2017 till 5th June, 2022), subject to a mid-term review after 3 years.

### About NSDC:

The National Skill Development Corporation (NSDC) is a one-of-its-kind, Public Private Partnership (PPP) model in India, under the Ministry of Skill Development & Entrepreneurship (MSDE). It aims to promote skill development by catalyzing creation of large, quality and for-profit vocational institutions. A not-for-profit company set up by the Ministry of Finance, under Section 25 of the Companies Act, it has an equity base of Rs.10 crore, of which the Government of India holds for 49%, while the private sector has the balance 51%.

NSDC provides funding to build scalable and profitable vocational training initiatives. Its mandate is also to enable support system which focuses on quality assurance, information systems and train the trainer academies either directly or through partnerships. NSDC acts as a catalyst in skill development by providing funding to enterprises, companies and organisations that provide skill training. It will also develop appropriate models to enhance, support and coordinate private sector initiatives. The differentiated focus on 21 sectors under NSDC's purview and its understanding of their viability will make every sector attractive to private investment.

### ISRO launches India's heaviest rocket

Indian Space Research Organisation (ISRO) has successfully launched the country's heaviest rocket – Geosynchronous Satellite Launch Vehicle-Mark III (GSLV-Mk III) – along with a communications satellite GSAT-19. GSAT-19 communications satellite is the heaviest to be lifted by an Indian rocket till date – to an altitude of around 179km above the Earth.

### About GSLV Mark III:

The GSLV Mk III D1 is a three-stage vehicle with indigenous cryogenic upper stage engine+ designed to carry heavier communication satellites into the Geosynchronous Transfer Orbit (GTO).

- The rocket's main and bigger cryogenic engine has been developed by space scientists indigenously. It will help India get a greater share of the multi-billion dollar global

space market and reduce dependency on international launching vehicles.

- It will also enable ISRO to launch from India heavier communications spacecraft to geostationary orbits of 36,000 km. Because of the absence of a powerful launcher, ISRO currently launches satellites above 2 tonnes on European rockets for a big fee.

#### About GSAT 19:

The GSAT-19, with a lifespan of 10 years, is a multi-beam satellite that will carry Ka and Ku-band payload along with a Geostationary Radiation Spectrometer (GRASP) payload to monitor and study the nature of the charged particles and influence of space radiation on spacecraft and electronic components.

- It would also employ advanced spacecraft technologies including bus subsystem experiments in the electrical propulsion system, indigenous Li-ion battery and indigenous bus bars for power distribution, among others.

#### India's biodiversity riches grow by 499 species

As per the latest reports by ZSI and BSI, 499 new species have been discovered in last one year in the country.

#### Key facts:

- Of these, 313 species are animal species and 186 are plants species. Of the new animal species, 258 are invertebrates and 55 vertebrates. As many as 97 species of insects, 27 of fish, 12 species of amphibians, 10 of Platyhelminthes, nine of Crustacea and six of reptiles have been discovered and described by the scientists. There are 61 species of moths and butterflies (order Lepidoptera) and 38 of beetles (Coleoptera).
- Most of the new species were from the four biological hotspots of the country — the Himalayas, the northeast, the Western Ghats and the Andaman and Nicobar Islands. For the first time, the number of animal species in the country, including protozoa, has crossed one lakh — 1,00,693 is the exact count. India is one of the 17 megadiversity countries and it has about 6.42% of the global fauna.
- The geographical distribution of the new plant species reveals that most discoveries were made in the Western Ghats (17%), followed by the Eastern Himalayas (15%),

the Western Himalayas (13%), the Eastern Ghats (12%) and the west coast (8%).

- Among the interesting discoveries of the year are eight new species of wild balsams, five species of wild ginger and one species of wild amla [Indian gooseberry]. Also, 39 varieties of mushrooms have been discovered. These new species will have use in horticulture and have medicinal value too.

#### Qatar diplomatic crisis

Saudi Arabia and other Arab countries have cut all diplomatic ties with Qatar in a move to isolate the nation.

#### Why have they cut ties?

Saudi Arabia said it took the decision because of Qatar's "embrace of various terrorist and sectarian groups aimed at destabilising the region", including the Muslim Brotherhood, al-Qaida, Islamic State and groups supported by Iran.

#### What does it mean for the oil price?

Oil prices are always sensitive to geopolitical tensions and the prospect of any disruption to production.

- Saudi Arabia, the UAE and Qatar are all members of the Organisation of the Petroleum Exporting Countries (Opec). Saudi Arabia is the de facto leader of the group as the largest oil producer in the world, while Qatar is one of Opec's smallest oil producers. The group recently agreed to cut oil production to help prop up prices; some investors are concerned that the dispute with Qatar could affect that deal. That plan to boost prices has also been undermined by rising oil output in the US.
- The row has also fanned concerns about the liquefied natural gas (LNG) market. Qatar is the world's biggest supplier of LNG and Egypt and UAE are key recipients. Although Saudi Arabia, the UAE, Egypt and Bahrain have all closed transport links with Qatar, the state can still ship out both LNG and oil to other countries by sea.

#### How will this affect India?

Indians are the largest expatriate community in Qatar, the same way they are in Saudi Arabia and the UAE — the two key countries who are in the opposite camp. And, the immediate worry is the trouble Indians would face as

measures to isolate Qatar would hit them there in terms of their travel.

- India also has robust defence and energy ties with Qatar. India is the third largest export destination for Qatar (behind Japan and South Korea) and ranks at 10th position for Qatar's imports.
- The Gulf Arab state is the largest supplier of LNG to India, accounting for over 65% of India's global import and 15% of Qatar's export of LNG with an annual import of 7.5 million metric tons (MMT) of liquefied natural gas (LNG) under a long-term contract between Petronet LNG of India and RasGas Co Ltd of Qatar, and some spot purchases by Indian companies from time to time.
- India also imports ethylene, propylene, ammonia, urea and polyethylene from Qatar. Therefore, the balance of trade continues to be heavily in Qatar's favour.

#### World Environment Day:

- Every June 5th is World Environment Day. On this day, communities and individuals around the world work to increase awareness of the importance of conserving the environment, the positive global impact of environmental regulations and controls and engage in activities that serve to educate and improve their environment locally.
- **The World Environment Day is a part of the United Nations Environmental Program (UNEP)** for creating awareness and action worldwide for the environment. The first World Environment Day was celebrated in 1973.
- The **theme for 2017:** 'Connecting People to Nature'. Every World Environment Day has a different global host country, where the official celebrations take place. This year it is Canada.

#### India's first Rural LED Street Lighting Project in Andhra Pradesh:

- Government of India, through the Energy Efficiency Services Limited (EESL) under the Ministry of Power, would be retrofitting 10 lakh conventional street lights with LED lights in Gram Panchayats of 7 districts in Andhra Pradesh. This is the first project for rural LED street lighting in the country under the Government of India's Street Lighting National Project (SLNP).

- This replacement drive in rural areas will help the gram panchayats to cumulatively save approximately 147 million units of electricity annually and lead to reduction of 12 crore tonnes of CO<sub>2</sub>.
- The entire upfront capital cost of this project is being funded by French Development Agency Agence Française de Développement (AFD).

#### Inclusive India Initiative

The National Trust under Ministry of Social Justice & Empowerment in collaboration with key partners recently organised the conference "Inclusive India Initiative: Towards an Inclusive India" for intellectual and developmental disabilities (IDDs).

#### What you need to know about this initiative?

The 'Inclusive India Initiative' of National Trust is specifically **catering to persons with intellectual and developmental disabilities**; with an objective to include these people in the mainstream and in all important aspects of social life, namely education, employment and community 'Inclusive India' in about changing the attitudes.

- The Inclusive India initiative is an attempt to facilitate the realisation of equal opportunities, protection of rights and full participation of individuals with intellectual and developmental disabilities into the fabric of society. The three core focus areas of Inclusive India Initiative are Inclusive Education, Inclusive Employment and Inclusive Community Life.
- In the domain of Inclusive Education, large-scale awareness campaigns would be executed on pan-India basis, making the schools and colleges inclusive for the children and adults with intellectual disabilities. Association with government and private organisations will be explored for making the infrastructure of educational institutes accessible and inclusive, by providing necessary mobility aids, assistive devices, accessible information and social support.
- The initiative will engage at least 2000 corporate sector organisations; public and private, for creating awareness towards inclusive employment for persons with intellectual disabilities, during the current financial year.

**Know about National Trust:**

The National Trust is a **statutory body of the Ministry of Social Justice and Empowerment**, set up under the “National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Retardation and Multiple Disabilities” Act (Act 44 of 1999). The National Trust was envisaged with a core mission of providing opportunities for capacity development of Persons with Disabilities and their families, fulfilling their rights, facilitating and promoting the creation of an enabling environment and an inclusive society.

**‘Skill for Life, Save a Life’ initiative**

The government has launched the ‘Skill for Life, Save a Life’ initiative.

**What you need to know about this initiative?**

‘Skills for Life, Save a Life’ Initiative’ aims **to upscale the quantity and quality of trained professionals in the healthcare system**. Under this initiative various courses are planned to be initiated targeting specific competencies for healthcare professionals as well as for general public.

**Significance of this move:**

The potential for skilled healthcare workers and professionals is immense in the country. Such courses ensure that the health sector gets the adequate skilled health workers. Skilling the youth enhances the employability and skilled India will help the nation reap rich dividends. This shall reduce the gap between expectations of employment of the youth and the actual job they get. Skill enhances economy of the country, too by reducing the gap between demand and supply of trained and skilled manpower in every field.

**Background:**

More than 65% youth are below the age of 35 years in India and the country should seize this opportunity by providing adequate skills and employability to the youth for a strong foundation for continued and sustainable growth.

**‘Hottest’ planet in universe discovered**

Scientists have discovered the hottest known planet located 650 light years from Earth, which is warmer than

most stars in the universe and sports a giant, glowing gas tail like a comet.

**What you need to know about the newly discovered planet?**

The Jupiter-like planet, named KELT-9b, orbits a massive star KELT-9 every day and a half.

- With a day-side temperature peaking at 4,326 degree Celsius, the newly discovered exoplanet is hotter than most stars and only 926 degree Celsius cooler than our Sun.
- The ultraviolet radiation from the star it orbits is so brutal that the planet may be evaporating away under the intense glare, producing a glowing gas tail.
- The gas giant 2.8 times more massive than Jupiter but only half as dense, because the extreme radiation from its host star has caused its atmosphere to puff up like a balloon.
- Since it is tidally locked to its star — as the moon is to Earth — the day side of the planet is perpetually bombarded by stellar radiation, and as a result the planet is so hot that molecules such as water, carbon dioxide and methane cannot form there.

**Centre notifies rules on capital gains tax**

The Income Tax Department has notified rules specifying equity transactions that will attract capital gains tax if securities transaction tax (STT) was not paid on them. The move comes after the Finance Act 2017 that aimed to curb the practice of declaring unaccounted income as exempt long-term capital gain by entering into sham transactions.

- This notification shall come into force with effect from April 1, 2018, and shall accordingly apply to assessment year 2018-19 and subsequent assessment years.

**Background:**

The Finance Act, 2017 amended the provisions of Section 10 (38) of the Income-Tax Act to provide exemption from long-term capital gains tax for income from transfer of equity share acquired on or after October 1, 2004, provided that the transaction had been charged for STT. All stock market transactions attract STT in the range of 0.017% to 0.125%.

**Key facts:**

- According to the notification that follows draft rules issued in April this year, the Central Board of Direct Taxes (CBDT) has specified transactions where payment of STT would be mandatory to get the benefit of exemption from capital gains tax. These include acquiring existing listed equity shares through a preferential issue in a company whose shares are not frequently traded, transactions off the stock exchange, and acquisition during the delisting period of the company.
- However, other genuine transaction, such as acquisition of equity shares by venture capital or investment funds, employee stock options, foreign direct investments by non-resident Indians and off-market transactions in schemes approved by the Supreme Court, high court, National Company Law Tribunal, SEBI and RBI, continue to be exempt.
- Further, acquisitions through preferential issues such as conversion of loan to equity, allotment to financial institutions pursuant to a debt restructuring scheme, acquisitions by banks and securitisation companies and also by modes such as gifts, holding subsidiaries, mergers and conversions would also be exempt from the new rules.

**20<sup>th</sup> anniversary of the formation of BIMSTEC**

BIMSTEC is celebrating 20<sup>th</sup> anniversary of its formation.

**What you need to know about BIMSTEC?**

BIMSTEC or the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation is a regional organisation which comprises of seven member states which lie near the Bay of Bengal.

- This sub-regional organisation was started on June 6, in the year 1997 through a Bangkok Declaration.
- BIMSTEC consists of seven countries: 5 come from South Asia, including India, Nepal, Bangladesh, Bhutan, and Sri Lanka; and 2 come from Southeast Asia, which includes Myanmar and Thailand.
- BIMSTEC headquarters are situated in Dhaka, Bangladesh.
- The whole region which constitutes the BIMSTEC is home to over 1.5 billion people. The population counts for

around 22 percent of the total world population. These countries have a combined GDP of \$2.7 trillion.

**Agreement between India and Somalia on transfer of sentenced persons**

The Union Cabinet has given its approval for signing and subsequent ratification of the Agreement on Transfer of sentenced persons between India and Somalia.

- Signing the Agreement with Somalia shall facilitate the Indian prisoners imprisoned in Somalia or vice-versa to be near to their families, for serving remaining part of their sentence and shall facilitate their social rehabilitation.
- The Government of India has signed bilateral Agreements on Transfer of Sentenced Persons with United Kingdom, Mauritius, Bulgaria, France, Egypt, Sri Lanka, Cambodia, South Korea, Saudi Arabia, Iran, Bangladesh, Brazil, Israel, Bosnia & Herzegovina, UAE, Italy, Turkey, Maldives, Thailand, Russian Federation, Kuwait, Vietnam, Australia, Hong Kong, Qatar, Mongolia, Kazakhstan, Bahrain and Estonia.

**Background:**

Prior to 2004, there was no domestic legislation under which foreign prisoners could be transferred to the country of their origin to serve the remaining part of their sentence, nor was there a provision for the transfer of prisoners of Indian origin convicted by a foreign court to serve their sentence in India. The transfer of such prisoners to their own native countries shall facilitate their social rehabilitation.

Hence **the Repatriation of Prisoners Act, 2003** was enacted for achieving the above purpose. For achieving the objectives of the Act, a treaty/agreement is required to be signed with countries having mutual interest with us on this matter.

**‘Vatsalya – Maatri Amrit Kosh’**

The ‘Vatsalya – Maatri Amrit Kosh’, a **National Human Milk Bank and Lactation Counselling Centre** was recently inaugurated at the Lady Hardinge Medical College (LHMC).

**What you need to know about this?**

“Vatsalya – Maatri Amrit Kosh” is established in **collaboration with the Norwegian government, Oslo University and Norway India Partnership Initiative (NIPDI).**

- It is a national human milk bank and lactation counseling centre that will collect, pasteurize, test and safely store milk that has been donated by lactating mothers and make it available for infants in need.
- In addition, this facility will protect, promote and support breastfeeding of their own healthy mothers by providing lactation support to mothers through dedicated lactation counsellors.
- This project will not only act as a dedicated centre to support breastfeeding and improve infant survival but also act as the teaching, training and demonstration site for other milk banks to be established under the Ministry Of Health and Family Welfare, Government of India.

**WHO revises antibiotics protocol**

In an effort to curb antibiotic resistance, the World Health Organization (WHO) has divided the drugs into three categories — access, watch and reserve — specifying which are to be used for common ailments and which are to be kept for complicated diseases.

- This is the biggest revision of the antibiotics section in the 40-year history of the essential medicines list (EML).

**Categories:**

- **Access:** Commonly used antibiotics will be under the ‘access’ category. Antibiotics in this group will be available at all times as treatment for a wide range of common infections. This includes amoxicillin, a widely-used antibiotic to treat infections such as pneumonia.
- **Watch:** The second line of antibiotics, slightly more potent, have been categorised under “watch”. The ‘watch’ group covers antibiotics that are recommended as first or second choice treatment for a small number of infections. Ciprofloxacin, used to treat cystitis (a type of urinary tract infection) and upper respiratory tract infections (like bacterial sinusitis and bacterial bronchitis), falls under this category. The WHO has recommended that prescription of these drugs should be dramatically reduced to avoid further development of resistance.

- **Reserve:** Potent drugs to be used only as a “last resort” fall under the ‘reserve’ category. This group includes antibiotics such as colistin and some cephalosporins that should be considered last-resort options, and used only in the most severe circumstances when all other alternatives have failed, such as for life-threatening infections due to multidrug-resistant bacteria.

**Significance of this move:**

- The new WHO list should help health system planners and prescribers ensure that people who need antibiotics have access to them, and ensure they get the right one, so that the problem of resistance doesn’t get worse.
- The new categorisation will further guide countries in ensuring access to appropriate antibacterial agents and support antimicrobial stewardship effort.

**Centre clears kambala Bill**

The Union Ministry of Law and Justice has cleared the Prevention of Cruelty to Animals (Karnataka Amendment) Bill 2017, legalising kambala — the traditional slush track buffalo race — and will send it to the President for his assent.

- The approval by the President will help in the smooth conduct of ‘kambala’ (the traditional slush track buffalo race) in Dakshina Kannada and Udipi districts of Karnataka.

**Background:**

The Karnataka Legislative Assembly had cleared the Bill in February 2017. Governor had referred the Bill to the President for his assent. The Bill seeks to exempt kambala and bullock-cart racing from the ambit of the Prevention of Cruelty to Animals (PCA) Act, 1960.

**About Kambala:**

Kambala in its traditional form is non-competitive with buffalo pairs made to race one after another in paddy fields, which is considered a thanksgiving to the Gods for protecting the animals from diseases.

Over the years, it has however become an organised sport with animal rights activists claiming that the buffaloes run in the race due to fear of being beaten, which the organisers dismiss, saying no violence is involved and that several

modifications had been made to ensure that it is an animal friendly event.

### **Astana to Host SCO Summit**

Astana, the Kazakh capital is hosting the two-day summit of the Shanghai Cooperation Organization (SCO).

- The 2017 summit would gather the leaders of China, India, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan and would be the first one with Islamabad and New Delhi as full-fledged members of the international organization.
- The next summit of the organization would take place in 2018 in China.

### **Background:**

The SCO was established on June 15, 2001 in Shanghai by six countries. At the 2016 summit held in Uzbekistan, the SCO leaders signed memorandums on the accession of India and Pakistan to the organization.

### **Oldest Homo sapiens fossils discovered:**

- The oldest fossil remains of Homo sapiens, dating back to 300,000 years, have been found at a site in Jebel Irhoud, Morocco. This is 100,000 years older than previously discovered fossils of Homo sapiens that have been securely dated.
- This marks the first discovery of such fossils in north Africa, and widens the “cradle of mankind” to encompass all of Africa.

### **Crete airport project in Greece:**

- GMR Infrastructure subsidiary GMR Airports Ltd., in partnership with Greek infrastructure firm Terna S.A., has bagged the project to develop, operate and manage the new international airport of Heraklion at Crete Island, Greece.
- It will be the designated airport operator in the consortium for the greenfield project.

### **South Korea to freeze new THAAD deployment:**

South Korea has suspended any further deployment of a controversial US missile defence system until an

environmental impact assessment ordered by new President Moon Jae-In is finished.

### **What you need to know about THAAD missile?**

The Terminal High Altitude Area Defense, or simply abbreviated as THAAD, is a missile defence system that is designed to intercept and destroy short and medium-range ballistic missiles in their final flight phase. First proposed in 1987 and then finally deployed in 2008, the THAAD cannot be used as a form of attack against an enemy. Its role, by use of a powerful radar, is to simply track and destroy missiles before they are launched.

### **‘DigiYatra’- A New Digital Experience for Air Travellers**

The Ministry of Civil Aviation is adding a Digital experience for Air Travellers through DigiYatra Platform.

### **What you need to know about DigiYatra?**

The ‘DigiYatra’ is an **industry-led initiative co-ordinated by the Ministry of Civil Aviation** aimed at transforming the nation into a digitally empowered society.

‘DigiYatra’ initiative aims to bring together entire industry to develop a digital ecosystem that will deliver Indian customers a seamless, consistent and paperless service experience at every touch point of their journey.

The platform will be built on 4 key pillars, like Connected Passengers, Connected Airports, Connected Flying and Connected Systems which can make it possible over a period of time for passengers to:

- Plan their trips efficiently by identifying price trends and estimate future airfares at the time of ticket booking,
- Optionally link their Aadhaar to airlines and other ecosystem players at the time of booking for faster airport entry and automated check-ins without requiring any paper-based interventions,
- Walk-through security scanners swiftly owing to advanced biometric security solutions,
- Receive relevant information pertaining to various facilities, protocols, airline timings, queue lengths at airports etc.,
- Engage in customised digital offerings at experience zones,

- Get real time notifications about congestion and delays to have greater visibility on the next step of journey,
- Conveniently navigate through the airport using digital guidance systems, interactive kiosks and augmented reality apps,
- Stay connected during flights and indulge in immersive experiences. Also, book in-flight services and destination based offerings digitally,
- Get a prompt when their luggage reaches the baggage claim belt, and
- Submit grievances, share experiences and provide feedback.

### **Central Board of Direct Taxes (CBDT) notifies new Safe Harbour Regime**

In order to reduce transfer pricing disputes, to provide certainty to taxpayers, to align safe harbour margins with industry standards and to enlarge the scope of safe harbour transactions, the Central Board of Direct Taxes (CBDT) has notified a new safe harbour regime based on the report of the Committee set up in this regard. It has come into effect from 1st of April, 2017. **The safe harbour regime is optional to taxpayers.**

#### **The salient features of the new Safe Harbour Regime are:**

- Assessee eligible under the present safe harbour regime up to AY 2017-18 shall also have the right to choose the safe harbour option most beneficial to them.
- A new category of transactions being “Receipt of Low Value-Adding Intra-Group Services” has been introduced.
- The new safe harbour regime is available for transactions limited to Rs. 200 crore in provision of software development services, provision of information technology-enabled services, provision of knowledge process outsourcing services, provision of contract research and development services wholly or partly relating to software development and provision of contract research and development services wholly or partly relating to generic pharmaceutical drugs.
- In respect of transactions involving provision of software development services and provision of information technology-enabled services, safe harbour margins have

been reduced to peak rate of 18% from 22% in the previous regime.

- In respect of transactions involving provision of knowledge process outsourcing services, a graded structure of 3 different rates of 24%, 21% and 18% has been provided, based on employee cost to operating cost ratio, replacing the single rate of 25% in the previous regime.
- In respect of transactions involving provision of contract research and development services wholly or partly relating to software development and provision of contract research and development services wholly or partly relating to generic pharmaceutical drugs, safe harbour margins have been reduced to 24% from 30% and 29% respectively in the previous regime.
- Risk spreads on intra-group loans denominated in foreign currency will be benchmarked to the 6-month London Inter-Bank Offer Rate (LIBOR) as on 30th September of the relevant year and on loans denominated in Indian Rupees to the 1-year SBI MCLR as on 1st April of the relevant year.

#### **Know about CBDT:**

The Central Board of Direct Taxes is a statutory authority functioning under the Central Board of Revenue Act, 1963. The officials of the Board in their ex-officio capacity also function as a Division of the Ministry of Finance dealing with matters relating to levy and collection of direct taxes.

- The Central Board of Direct Taxes (CBDT) is a part of the Department of Revenue in the Ministry of Finance, Government of India. It provides essential inputs for policy and planning of direct taxes in India and is also responsible for administration of the direct tax laws through Income Tax Department.
- It is India’s official Financial Action Task Force unit.
- The Central Board of Revenue as the Department apex body charged with the administration of taxes came into existence as a result of the Central Board of Revenue Act, 1924.
- Initially the Board was in charge of both direct and indirect taxes. However, when the administration of taxes became too unwieldy for one Board to handle, the Board was split

up into two, namely the Central Board of Direct Taxes and Central Board of Excise and Customs in 1964.

- The CBDT Chairman and Members of CBDT are selected from Indian Revenue Service (IRS), a premier civil service of India, whose members constitute the top management of Income Tax Department.

### Nanoparticles to treat eye infection

Scientists at the Hyderabad-based CSIR-Centre for Cellular and Molecular Biology (CSIR-CCMB) have developed a novel way to treat fungal keratitis.

#### What is it?

Treating keratitis infection is currently a challenge because it is difficult to maintain a therapeutic dose at the corneal surface for long periods as blinking and tear formation washes off the drug. To address this challenge, scientists have developed protein-based nanoparticles that encapsulate the drug.

- Certain antibodies get attached to the outer surface of the nanoparticles, thus anchoring the nanoparticles to the corneal surface. The infected cornea expresses a set of receptors (TLR4) when infection sets in. Scientists have used antibodies to these receptors to anchor the nanoparticles to the cornea.
- If the infection is severe, more receptors are expressed on the cornea and more nanoparticles get bound to the receptors. Since they are bound, the residence time in the eye is long; neither blinking nor tear formation washes off the nanoparticles.
- The enzymes secreted by fungi breaks down the gelatine protein of nanoparticles that encapsulates the drug, thus releasing the drug. Like in the case of the receptors, more enzyme is secreted when infection is severe leading to more drug being released from the nanoparticles.
- The gelatine protein acts as an alternative nutrient for the fungi. The fungi also degrade the gelatine-based nanoparticle to derive nutrients thus minimising the damage to the corneal tissue. In the process it releases the drug. In a sense, the fungi are committing suicide by consuming the gelatine protein.

### Know about Keratitis?

- Keratitis is **the inflammation of the eye**, which starts with redness and itching and might eventually lead to blindness.
- Keratitis can be caused by both bacteria and fungi. Fungi attach themselves to the cornea and release enzymes that break down the corneal proteins for their nutritional requirements.
- In the process the cornea also gets inflamed. Corneal damage causes wound and scar formation leading to severe visual impairment. It is estimated that about 30% of keratitis cases in India lead to blindness.

### DGFT may come under Revenue dept.

The Centre is considering a proposal to shift the entire Directorate General of Foreign Trade (DGFT) office to the Department of Revenue (DoR) from the Department of Commerce (DoC) — as part of measures to simplify processes relating to export and import.

- The suggestion — billed as a major trade facilitation measure and in line with the Centre's 'Ease of Doing Business' initiative — was mooted recently by the Central Board of Excise and Customs (CBEC) in the DoR within the Finance Ministry.

### Know about DGFT:

- Directorate General of Foreign Trade (DGFT) organisation is an attached office of the Ministry of Commerce and Industry and is headed by Director General of Foreign Trade. Right from its inception till 1991, when liberalization in the economic policies of the Government took place, this organization has been essentially involved in the regulation and promotion of foreign trade through regulation.
- Keeping in line with liberalization and globalization and the overall objective of increasing of exports, DGFT has since been assigned the role of "facilitator". The shift was from prohibition and control of imports/exports to promotion and facilitation of exports/imports, keeping in view the interests of the country.
- The DGFT's role includes Foreign Trade Policy (FTP) formulation and implementation — to in turn boost India's exports. It is manned mainly by **the Indian Trade Service**

**(ITS) cadre officials, but is usually headed by an Indian Administrative Service (IAS) officer.**

#### Implications of the new move:

If the proposal is accepted, the DGFT will be placed within the DoR and staffed entirely by Indian Revenue Service (IRS) officials. To enable an IRS official to head the DGFT, a new post — Principal/Chief Commissioner (Foreign Trade) equivalent to Additional Secretary to Government of India (the rank of the official currently heading the DGFT) — will be created.

#### What necessitates this move?

This is to better utilise the Department of Commerce's resources (including ITS cadre officials) in 'core focus areas' such as FTP formulation as well as in India's trade negotiations. This is also to ensure greater ease of doing business.

#### Way ahead:

The shifting of DGFT office would require amendments in the concerned laws — the Foreign Trade (Development & Regulations) Act and the Customs Act.

#### \$1 mn fund to bolster BRICS media

China's state-run news agency Xinhua has announced a USD one million fund to institutionalise media cooperation among the BRICS countries including awards for journalists from the five member states. This was announced at the recently held BRICS media forum.

- The plan will promote six objectives, including “balanced reporting”— a view shared by several speakers at the forum, who called for alternative media narrative, which did not take the cue from Washington or London.
- The proposal would also focus on joint development of BRICS digital media, financial information services and promoting people- to-people contacts.

#### Background:

Journalists from 27 media organisations from BRICS countries took part in the BRICS Media Forum. The forum with the theme Deepening media cooperation among BRICS countries, promoting equity and justice in international media was proposed by Xinhua and jointly initiated with

Brazil's CMA Group, Russia's Sputnik News Agency and Radio, the Hindu Group of India and South Africa's Independent Media.

#### Know about BRICS:

BRICS brings together five major emerging economies, comprising 43% of the world population, having 30% of the world GDP and 17% share in the world trade.

- The acronym BRIC was **first used in 2001 by Goldman Sachs in their Global Economics Paper, “The World Needs Better Economic BRICs”** on the basis of econometric analyses projecting that the economies of Brazil, Russia, India and China would individually and collectively occupy far greater economic space and would be amongst the world's largest economies in the next 50 years or so.
- As a formal grouping, BRIC started after the meeting of the Leaders of Russia, India and China in St. Petersburg on the margins of G8 Outreach Summit in 2006. The grouping was formalized during the 1st meeting of BRIC Foreign Ministers on the margins of UNGA in New York in 2006. The 1st BRIC Summit was held in Yekaterinburg, Russia, on 16 June 2009.
- It was agreed to expand BRIC into BRICS with the inclusion of South Africa at the BRIC Foreign Ministers' meeting in New York in September 2010. Accordingly, South Africa attended the 3rd BRICS Summit in Sanya, China in April 2011.

#### Only PSUs may be let to make Oxytocin

After being banned in retail markets, the Drug Controller will soon restrict manufacturing of controversial hormone drug Oxytocin to public sector undertakings (PSUs).

#### Know about Oxytocin:

Oxytocin has also been dubbed the love hormone, hug hormone, cuddle chemical, moral molecule, and the bliss hormone due to its effects on behavior, including its role in love and in female reproductive biological functions in reproduction.

- Oxytocin is a hormone that is made in the brain, in the hypothalamus. It is transported to, and secreted by, the pituitary gland, which is located at the base of the brain.

- It acts both as a hormone and as a brain neurotransmitter.
- The release of oxytocin by the pituitary gland acts to regulate two female reproductive functions: Childbirth and Breast-feeding.

#### Why its sale is being limited?

The drug is used by dairy owners and farmers to boost milk production and make vegetables look bigger and fresher. But, it was found that indiscriminate use of Oxytocin in milch animals and by farmers was causing irreversible hormone damage.

#### Background:

Despite it being a Schedule H drug, it is impossible to prevent its manufacturing at registered private factories. Implications to human health are humongous, from reproductive complications to hormonal imbalances. One major reason for such blatant misuse of this drug is the absence of robust veterinary services in India.

In March 2016, the Himachal Pradesh High Court directed the Central government to “consider the feasibility of restricting the manufacture of Oxytocin only in public sector companies and also restricting and limiting the manufacture by companies to whom licences have already been granted.” The manufacture and sale of Oxytocin without a licence is a cognisable.

#### World’s oldest fossil mushroom discovered:

- The world’s oldest fossil mushroom – dating back to about 115 million years – has been discovered in Brazil.
- The mushroom has been named Gondwanagaricites magnificus and belongs to the Agaricales order.

#### SATH program launched by NITI Aayog

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

#### What you need to know about SATH program?

SATH aims to identify and build three future ‘role model’ states for health systems.

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

#### Selection of states:

To select the three model states, NITI defined a **three-stage process – expression of interest, presentations by the states and assessment of commitment to health sector reforms**.

States will be selected on the basis of evaluations and objective assessment of criteria affecting the potential for impact and likelihood of success. Metrics such as MMR, IMR, incidence of malaria and others have been considered for determining potential impact while density of doctors and nurses, compliance to IPHS norms are some of the metrics used to determine likelihood of success.

#### Swiss support India’s NSG bid

Switzerland, the incoming chair of the Nuclear Suppliers Group (NSG), will support application for membership, but has left the door open for Pakistan to join as well.

#### Grossi process:

Switzerland may resort to Grossi process in a bid to support India. The “Grossi process” mandates the former NSG chairperson and diplomat Rafael Grossi to build a consensus among all 48 countries of the NSG, many of which resisted India’s membership bid at the Seoul plenary session in 2016, unless the country signs the Non-Proliferation Treaty.

**Way ahead:**

India, meanwhile, appears to be mulling its options over how strongly to pitch its case at the nuclear club.

**About NSG:**

Nuclear Suppliers Group (NSG) is a multinational body concerned with reducing nuclear proliferation by controlling the export and re-transfer of materials that may be applicable to nuclear weapon development and by improving safeguards and protection on existing materials.

- Interestingly, the NSG was set up in 1974 as a reaction to India's nuclear tests to stop what it called the misuse of nuclear material meant for peaceful purposes.
- Currently, it has 48 members.

**Once admitted, an NSG member state:**

- Gets timely information on nuclear matters.
- Contributes by way of information.
- Has confirmed credentials.
- Can act as an instrument of harmonization and coordination.
- Is part of a very transparent process.

**Background:**

India sought membership of the NSG in 2008, but its application hasn't been decided on, primarily because signing the NPT or other nuclear moratoriums on testing is a pre-requisite. However, India has received a special waiver to conduct nuclear trade with all nuclear exporters.

India, Pakistan, Israel and South Sudan are among the four UN member states which have not signed the NPT, the international pact aimed at preventing the spread of nuclear weapons.

**Data protection law mooted**

The government is mulling a new data protection law to protect personal data of citizens, while also creating an enabling framework to allow public data to be mined effectively. The move assumes significance amid the debate over security of individuals' private data, including

Aadhaar-linked biometrics, and the rising number of cyber-crimes in the country. A proposal to this effect has been sent to the Prime Ministers' Office for approval.

**Need for a law in this regard:**

The underlying infrastructure of the digital economy is data. India is woefully unprepared to protect its citizens from the avalanche of companies that offer services in exchange for their data, with no comprehensive framework to protect users.

**Present scenario:**

Currently, India does not have a separate law for data protection, and there is no body that specifically regulates data privacy.

- There is nominally a data protection law in India in the form of the Reasonable Security Guidelines under Section 43A of the Information Technology Act. However, it is a toothless law and is never used.
- Some redress for misuse of personal data by commercial entities is also available under the Consumer Protection Act enacted in 2015. As per the Act, the disclosure of personal information given in confidence is an unfair trade practice.

**However, none of these has been effective.**

**Unclaimed PF to fund medical costs**

A committee of secretaries has directed the Labour Ministry to frame scheme for benefit of senior citizens who are PF subscribers from inoperative account funds. With this, savings remaining unclaimed in dormant Employees' Provident Fund (EPF) accounts for seven years will be used to fund a new scheme for providing medical benefits to pensioners under the EPF scheme.

**Key facts:**

The EPFO has already started discussions with the Employees' State Insurance Corporation (ESIC) to frame a medical benefits scheme for pensioners under Employees' Pension Scheme (EPS) of the EPFO.

- The scheme will be contributory in nature with EPF pensioners contributing a portion of their income towards

the medical scheme and rest flowing from inoperative accounts of the EPFO.

- Once the scheme is put in place, EPF pensioners will be able to avail medical facilities from a network of more than 1,400 dispensaries and 150 hospitals under ESIC across the country.

#### Background:

**EPF money becomes unclaimed after a subscriber doesn't withdraw money after reaching 61 years of age.** Accounts also become inoperative **if persons settling abroad do not withdraw their money within three years.**

The government had framed a law last year wherein unclaimed money under EPF, Public Provident Fund and small saving schemes such as post office savings accounts for a period of seven years will be diverted to set up a senior citizens' welfare fund. The trade unions had strongly protested the move to divert EPF money for setting up a fund for the elderly. Following this, it was decided that the unclaimed EPF money will be diverted for EPF pensioners only.

#### About EPFO:

The Employees' Provident Fund Organisation, a statutory body, is one of the largest social security organizations in India in terms of volume of financial transactions undertaken and number of covered beneficiaries. It works under the overall aegis of the Ministry of Labour and Employment.

#### We Wear Culture:

- It is a global digital platform fashion project launched by Google. Working with 183 renowned cultural institutions from around the world, including India, Google's project 'We Wear Culture' lets people explore the history of clothes dating as early as 3,000 years ago from the ancient Silk Road, to the courtly fashion of Versailles, to the unmatched elegance of the Indian Saree.
- The online project includes collections from Chhatrapati Shivaji Maharaj Vastu Sangrahalaya (CSMVS) and varied weaves from across India, from Gharchola to Patola to Temple to Ikat sarees, as it traces the story and importance of Indian textiles from ancient sculptures, the company said.

- The world fashion exhibit also showcases designs from north-eastern India including the weaves of tribes such as the Nagas, Meitis and the traditional attire from Meghalaya called 'Dhara' or 'Nara' worn by the Khasi women.

#### Tele-Law through CSCs To Mainstream Legal Aid in Rural India

In its effort to make legal aid easily accessible to the marginalized communities and citizens living in rural areas, the Government of India has launched the 'Tele-Law'.

#### What you need to know about the scheme?

Under the scheme, a portal called 'Tele-Law' will be launched, which will be available across the Common Service Centre (CSC) network. This will connect the citizens to legal service providers with the help of technology enabled platforms.

- 'Tele-Law' will enable people to seek legal advice from lawyers through video conferencing available at the Common Service Centres (CSC). Additionally, law school clinics, District Legal Service Authorities, voluntary service providers and Non-Government Organisations working on legal aid and empowerment can also be connected through the CSCs anywhere and anytime, in order to strengthen access to justice for the marginalized communities.

- The National Legal Services Authority (NALSA) will provide a panel of lawyers from State capitals, who will be available through video conferencing to provide legal advice and counselling to the applicants, across the 1000 Common Service Centres (CSC).
- A robust monitoring and evaluation system is also being designed which will help in assessing the quality of legal advice provided and the ensuing benefit to those accessing it.

#### PLVs:

Under this scheme, every Common Service Centre (CSC) will engage a Para Legal Volunteer (PLV), who will be the first point of contact for the rural citizens and will help them in understanding the legal issues, explain the advice given by lawyers and assist in further action required in cases as per the advice of the lawyer.

- Women PLVs will be encouraged and trained under the Scheme. One thousand women PLVs will work for mainstreaming legal aid services through the CSCs. The aim is to promote women entrepreneurship and empowerment and ensure women participation. The selected PLVs will also be provided with relevant training to fulfil their responsibilities effectively.
- A trained PLV will be available in a CSC for ten days in a month under the Scheme. These PLVs will help the applicant connect with a lawyer through the video conferencing facility at the CSC and will keep a track of the progress of the applicants' cases and grievances and maintain a record.
- They will also submit the records maintained to the District Legal Service Authority every week. The National Legal Service Authority (NALSA) will provide a panel of lawyers who will be sitting in the State capitals and will be available through video conferencing to provide legal advice/counselling to the applicant at the CSCs.

#### Key facts you should know:

- The Ministry of Law and Justice partnered with the Ministry of Electronics and Information Technology (MeitY), which anchors the Digital India programme, to provide legal aid services through its Common Service Centres (CSC) at the panchayat level, spread across the country.
- In the first phase, the 'Tele-Law' scheme will be tested as a pilot across 500 Common service Centres (CSC) in Uttar Pradesh and Bihar to understand the challenges and make necessary corrections to the scheme before it is scaled up and rolled out across the country in a phased manner.

#### QS World University Rankings 2018

QS World University Rankings 2018 have been released. The QS World University Rankings are published annually by British company Quacquarelli Symonds (QS). The team at QS has analysed over 75 million citations from more than 12 million papers, 115,000 survey responses from employers and academics and considered more than 4,000 universities before evaluating 980 of them.

- The QS rankings give highest weightage of 40% to academic reputation, followed by faculty-student ratio and

citations per faculty (20% each), and employer reputation (10%).

#### Performance of Indian institutions:

- Only 12 Indian institutions and universities have made it to the top 700 this year with IIT-Delhi topping at 172 rank while IISc, Bengaluru gets 190th rank. IIT- Bombay is at 179<sup>th</sup>
- Only four universities — University of Delhi (481-490); Jadavpur University (601-650), University of Hyderabad (601-650) and Anna University (651-700) figured in the top.

#### Global performance:

The Massachusetts Institute of Technology (MIT) has been ranked as the world's best university for the sixth consecutive year. The second and third place in the overall rankings has been occupied by Stanford University and Harvard University respectively.

#### India awards road contract to complete Kaladan project in Myanmar

The contract for building 109-km road connecting Paletwa river terminal to Zorinpui in Mizoram border has been awarded by the government. The construction is expected to start after the monsoon in October.

#### Background:

Mooted in 2003, India entered a framework agreement with Myanmar for Kaladan project in 2008. Construction began in 2010 with a deadline in June 2015. But, no headway was achieved on the road project. Inadequate fund allocation and planning failure were seen as major reasons for the delay. In October 2015, the government revised the budget estimates by nearly six times to ₹ 2,904 crore and roped in State-owned Iacon Infrastructure and Services Ltd as consultant with an aim to complete the project in 2019. However, finding a contractor became an issue. Last year, the project was tendered twice but without success.

#### Know about Kaladan project:

The Kaladan project connects Sittwe Port in Myanmar to the India-Myanmar border.

- The project was jointly initiated by India and Myanmar to create a multi-modal platform for cargo shipments from the eastern ports to Myanmar and to the North-eastern parts of the country through Myanmar.
- It is expected to open up sea routes and promote economic development in the North-eastern states, and also add value to the economic, commercial and strategic ties between India and Myanmar.
- This project will reduce distance from Kolkata to Sittwe by approximately 1328 km and will reduce the need to transport good through the narrow Siliguri corridor, also known as Chicken's Neck.

#### **India, UNOSSC launch partnership fund to promote sustainable development**

India and the UN Office for South- South Cooperation have launched a partnership fund that will support sustainable development projects across the developing world.

#### **Key facts:**

- Managed by UNOSSC, the India-UN Development Partnership Fund will support Southern-owned and led, demand-driven, and transformational sustainable development projects across the developing world.
- Focusing on Least Developed Countries (LDCs) and Small Island Developing States (SIDS), United Nations agencies will implement the Fund's projects in close collaboration with partnering governments.
- The India-UN Development Partnership Fund will implement country-level projects that are catalytic towards achieving the 17 sustainable development goals of the 2030 Agenda.
- The collaborative initiative is aimed at reducing poverty and hunger, improving health, education and equality, and expanding access to clean water, energy and livelihoods.

#### **Know about UNOSSC:**

The United Nations Office for South-South Cooperation (UNOSSC) was established to promote, coordinate and support South-South and triangular cooperation globally and within the United Nations system.

UNOSSC, hosted by UNDP since 1974, was established by the UN General Assembly with a mandate to advocate for and coordinate South-South and triangular cooperation on a global and UN system-wide basis. UNOSSC receives policy directives and guidance from the General Assembly and through its subsidiary body, the High-level Committee on South-South Cooperation. UNOSSC submits its strategic planning frameworks to the UNDP, UNFPA and UNOPS Executive Board for approval and funding. The Director reports to the UNDP Administrator and has also been appointed Envoy of the Secretary-General on South-South Cooperation.

#### **Scientists conjure up largest virtual universe:**

Researchers from the University of Zurich have simulated the formation of our entire universe with a large supercomputer. A gigantic catalogue of about 25 billion virtual galaxies has been generated from 2 trillion digital particles. This catalogue is being used to calibrate the experiments on board the Euclid satellite, that will be launched in 2020 with the objective of investigating the nature of dark matter and dark energy.

#### **Floating solar farm reflects China's clean energy aims:**

China has launched the world's largest floating solar farm. The 40-megawatt power plant has 1,60,000 panels resting on a lake that emerged after the collapse of a coal mine in central Anhui province. It is part of Beijing's effort to wean itself off a fossil fuel dependency that has made it the world's top carbon emitter, with two-thirds of its electricity still fuelled by coal.

Council of Scientific and Industrial Research (CSIR), established in 1942, is an autonomous body and the largest research and development (R&D) organisation in India.

- Although it is mainly funded by the Ministry of Science and Technology, it operates as an autonomous body registered under the Registration of Societies Act of 1860.
- The research and development activities of CSIR includes aerospace engineering, Structural engineering, ocean sciences, Life sciences, metallurgy, chemicals, mining, food, petroleum, leather, and environment.

#### **Panel to study free movement along Myanmar border**

The Union Home Ministry has constituted another committee to examine methods to curb the misuse of free movement along the Myanmar border, indicating a

significant shift in India's policy towards Myanmar, a friendly country, with which it shares unfenced borders and unhindered movement of people across the border.

#### Need for curbs:

Free movement regime is being misused by militants and trans-border criminals who smuggle weapons, contraband goods and fake Indian currency notes. Taking advantage of the free-movement regime, occasionally they enter India, commit crimes and escape to their relatively safer hideouts.

#### Free movement regime (FMR):

The formation of Myanmar as a separate State in 1935 and decolonisation of the sub-continent in 1947 divided ethnic communities living along the Indo-Myanmar border.

- These communities, particularly Nagas, found the newly created boundary to be inconsistent with the traditional limits of the region they inhabited. And they felt a deep sense of insecurity because they became relegated to the status of ethnic minorities on both sides of the border.
- To address their concerns and enable greater interaction among them, the Indian and Myanmar governments established the Free Movement Regime (FMR), which allowed Nagas to travel 16 kilometres across the border on either side without any visa requirements.

#### Background:

India shares 1,643-km long border with Myanmar that passes through four states of Arunachal Pradesh, Nagaland, Manipur and Mizoram.

#### Nalanda model of water conservation chosen for national award

A model of water conservation adopted successfully by the authorities in Nalanda district of south central Bihar, has been selected for the national award for excellence in the Mahatma Gandhi national rural employment guarantee programme (MGNREGP), by the ministry of rural development. The award for excellence will be conferred on 'Project Jal Sanchay', the water conservation model.

#### Project Jal Sanchay:

'Project jal sanchay' was launched under MGNREGP, to offer farmers a wide spectrum of solutions to water crisis.

Under this, check dams were created and traditional Aahar-Pyne irrigation system and traditional water bodies were desilted and renovated, accompanied by campaigns to create awareness about rainwater harvesting. The water conservation project has not only improved the availability of water but has also positively impacted farm production in the areas covered by the project.

#### 51 EMR Schools made Functional during The Last three years

Ministry of Tribal Affairs has actively initiated various efforts during the last three years to make more Eklavya Model Residential Schools (EMRS) functional. As a result, 51 new EMRS were made functional during the last three years. 161 EMR Schools are functional right now, while this figure was at 110 in the year 2013-14. More than 52 thousand tribal students are taking education in 161 EMR Schools of 26 States.

- In order to further educational opportunities for more ST children, Government has sought to extend the facility of EMRSs in all the 672 Blocks where ST population is more than 50% of the total population in a span of next five years.

#### What you need to know about Eklavya Model Residential Schools (EMRS)?

Eklavya Model Residential School Scheme was started in 1998 and **first school was started in the year 2000 in Maharashtra**. EMRSs have been functioning as institutions of excellence for tribal students.

- A total of 259 schools have been sanctioned during the last 17 years, out of which, 72 EMRS were sanctioned during last three years.
- As per existing EMRS Guidelines of 2010, **at least one EMRS is to be set up in each Integrated Tribal Development Agency (ITDA) / Integrated Tribal Development Project (ITDP) having 50% ST population in the area.**
- The capital cost for setting up the school complex, including hostels and staff quarters etc. has been earmarked at Rs. 12 crore with a provision to go up to Rs.16 crore in hill areas, deserts and islands. Recurring cost during the first year for these schools would be Rs. 42000/-per child, with a provision of raising it by 10% every second year to compensate for inflation etc.

### India to be Co-Partner Country in ANUGA 2017

India has signed the Memorandum of Understanding for Participation in the ANUGA Exhibition with Ms Katharina C Hamma, Chief Operating Officer, Koelnmesse GmbH (Organizers of ANUGA).

#### ANUGA Background:

ANUGA – an acronym for Allgemeine Nahrungs Und Genussmittel Ausstellung (General Food and Non-essential Provisions Exhibition) is **the world's biggest and most important trade fair for Food and beverage trade**. It takes place biennially (every 2 years). ANUGA 2017 is the 34th edition.

- ANUGA offers an extensive supporting programme with Lectures, Special exhibition and attractive industry events
- ANUGA is the leading export platform with 7,189 exhibitors from 109 countries with over 85% of Exhibitors from abroad.
- 1,60,000 decision makers from the retail and out-of-home market from 192 countries visited during last ANUGA. 66% of the industry visitors are foreigners.

#### India ratifies two key ILO conventions on child labour

India has ratified two key ILO conventions on child labour concerning the elimination of child labour, the Minimum Age Convention (No 138) and the Worst Forms of Child Labour Convention (No 182).

- India is the 170th ILO member state to ratify convention No 138 and 181st member to ratify convention No. 182.

#### Minimum Age Convention:

The Convention concerning Minimum Age for Admission to Employment, is a Convention adopted in 1973 by the International Labour Organization.

- It requires ratifying states to pursue a national policy designed to ensure the effective abolition of child labour and to raise progressively the minimum age for admission to employment or work.
- Countries are free to specify a minimum age for labour, with a minimum of 15 years. A declaration of 14 years is also possible when for a specified period of time. Laws may also permit light work for children aged 13–15 (not

harming their health or school work). The minimum age of 18 years is specified for work which “is likely to jeopardise the health, safety or morals of young persons”. Definitions of the type of work and derogations are only possible after tripartite consultations (if such a system exists in the ratifying country).

#### Worst Forms of Child Labour Convention:

The Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, known in short as the Worst Forms of Child Labour Convention, was adopted by the International Labour Organization (ILO) in 1999.

- By ratifying this Convention, a country commits itself to taking immediate action to prohibit and eliminate the worst forms of child labour.
- The ILO's International Programme on the Elimination of Child Labour (IPEC) is responsible for assisting countries in this regard as well as monitoring compliance. One of the methods used by IPEC to assist countries in this regard are Time-bound Programmes.
- The convention includes forms of child labour, which are predefined worst forms of child labour. They are also sometimes referred to as automatic worst forms of child labour.

#### Background:

India is a **founder member of the International Labour Organization (ILO)**, which came into existence in 1919.

- At present, the ILO has 187 members.
- The principal means of action in the ILO is the setting up of International standards in the form of Conventions, Recommendations and Protocol.
- India had so far ratified 45 Conventions, out of which 42 are in force. Out of these 4 are Fundamental or Core Conventions.

#### India has second highest number of obese children in world: Study

India has the second highest number of obese children in the world after China, according to an alarming study which found that 14.4 million kids in the country have excess weight.

**Highlights of the study:**

- Globally, over two billion children and adults suffer from health problems related to being obese, and an increasing number die from these conditions. However, of the four million deaths attributed to excess body weight in 2015, nearly 40% occurred among people whose body mass index (BMI) fell below the threshold considered “obese”.
- Among the 20 most populous countries, the highest level of obesity among kids and young adults was in the US at nearly 13%; Egypt topped the list for adult obesity at about 35%. Lowest rates were in Bangladesh and Vietnam, respectively, at 1%.
- China with 15.3 million and India with 14.4 million had the highest numbers of obese children; the US with 79.4 million and China with 57.3 million had the highest numbers of obese adults in 2015.
- The prevalence of obesity has doubled since 1980 in more than 70 countries and has increased in most other nations, the study said. Although the prevalence of obesity among children has been lower than among adults, the rate of increase in childhood obesity in many countries was greater than that of adults.

**Panama dumps Taiwan, supports One-China policy**

In a jolt to Taiwan and boost to Beijing’s diplomacy, Panama has severed ties with the country and recognised it as an “indispensable” part of China under the “One-China Policy”. With Panama switching sides, Taiwan’s decades-old attempt to act as a “sovereign country” would likely face fresh challenges.

- Over the years Beijing has tried to choke Taiwan diplomatically in a bid to force the self-ruled island to accept itself as a part of China.

**What is One-China Policy?**

The policy states in diplomatic acknowledgement that there is only one Chinese government. Under the policy, any country that wants diplomatic relations with mainland China must break official ties with Taipei that it considers a ‘breakaway province.’

**How China has been trying to choke Taiwan in recent years?**

Beijing doesn’t trust present Taiwan President Tsai Ing-wen and her ruling party, which advocates independence for Taiwan. After Tsai came to power last year, China had cut official communication channels with her government in a bid to pressure her to accept that Taiwan is part of China.

- A year ago, Taiwan had diplomatic ties with 23 countries. But in the last one year itself, as many as three countries have severed diplomatic ties with the country, which is claimed by China as its own — a part of the mainland.
- In 2007, Costa Rica was the first of Taiwan’s Central American partners to switch allegiance to China. It was southern African nation of Malawi in 2008. Gambia in West Africa followed suit in 2013. Last year, small African states Sao Tome and Principe switched ties from Taiwan to China.

**Successful Flight Test of ATGM Nag:**

- The Anti-Tank Guided Missile Nag was successfully flight tested in the desert ranges of Rajasthan.
- Nag is a third-generation, fire-and-forget, anti-tank guided missile developed by India’s state-owned Defence Research and Development Organisation (DRDO) to support both mechanised infantry and airborne forces of the Indian Army.
- The missile incorporates an advanced passive homing guidance system and possesses high single-shot kill probability. It is designed to destroy modern main battle tanks and other heavily armoured targets.
- Nag can be launched from land and air-based platforms. The land version is currently available for integration on the Nag missile carrier (NAMICA), which is derived from a BMP-2 tracked infantry combat vehicle.
- The Nag missile was indigenously developed under the Indian Ministry of Defence’s integrated guided missile development programme (IGMDP), which also involved the development of four other missiles that are Agni, Akash, Trishul and Prithvi.

**Army's Super-40:**

- It is a coaching initiative by the Army that has been training local children to take Engineering Entrance Examination.
- The coaching is conducted at Srinagar by Army, its training partner Centre for Social Responsibility & Learning (CSRL) and Petronet LNG.

**Congenital Adrenal Hyperplasia (CAH):**

Parents of a CAH child, have started a support group called 'CAH Support India' ([www.cahindia.org](http://www.cahindia.org)) involving a community of parents, grandparents and caregivers of CAH children. The International Coalition for Endocrine Patient Support Organisations worldwide has listed this support group as the first such group for endocrine disorders in India.

**What you need to know about CAH?**

- CAH is an inherited disorder that affects the adrenal glands where the glands cannot produce cortisol and aldosterone, and instead produce an unwanted excess amount of androgens.
- A child with CAH lacks enzymes the adrenal glands use to produce hormones that help regulate metabolism, the immune system, blood pressure, and other essential functions. Parents with children suffering from it often have great difficulty in the upbringing of the child, including treatment, getting school admission and other support issues

**Neeru Chadha becomes first Indian woman to be member of International Tribunal for the Law of the Sea**

In a significant victory for India at the UN, international law expert Neeru Chadha has won a crucial election to a top UN judicial body that deals with disputes related to the law of the sea, becoming **the first Indian woman to be appointed as a judge at the tribunal.**

- Chadha, an eminent lawyer and the first Indian woman to become the chief legal adviser in the ministry of external affairs, is elected for a nine-year term from 2017 to 2026.
- Chadha is only **the second woman to be judge of ITLOS in its two decades of existence**, where there have been a total of 40 judges.

**About ITLOS:**

The Hamburg-based ITLOS, established in 1996, is **one of dispute settlement mechanisms under the UN Convention on the Law of the Sea (UNCLOS) that entered into force in 1994.**

- The Tribunal is composed of 21 independent members who are elected from among persons enjoying the highest reputation for fairness and integrity and of recognised competence in the field of the law of the sea.
- The tribunal is based in Hamburg, Germany.
- The Tribunal has the power to settle disputes between party states. Currently, there are 161 parties.
- India is also a signatory to this convention.

**Cabinet approves Interest Subvention to banks on Short-Term crop loan to farmers**

The government has approved the Interest Subvention Scheme (ISS) for farmers for the year 2017-18. This will help farmers getting short term crop loan up to Rs. 3 lakh payable within one year at only 4% per annum. The Government has earmarked a sum of Rs. 20,339 crore for this purpose.

**What you need to know?**

- The Interest Subvention Scheme will continue for one year and it will be implemented by NABARD and RBI.
- The objective of the scheme is to make available at ground level, agricultural credit for Short Term crop loans at an affordable rate to give a boost to agricultural productivity and production in the country.
- The interest subvention will be given to Public Sector Banks (PSBs), Private Sector Banks, Cooperative Banks and Regional Rural Banks (RRBs) on use of own funds and to NABARD for refinance to RRBs and Cooperative Banks.

**About Interest subvention scheme:**

The scheme has been running since 2006-07. Under this, the farmers can avail concessional crop loans of upto Rs.3 lakh at 7% rate of interest. It also provides for an additional subvention of 3%. Prompt Repayment within a period of one year from the date of advance. As a measure to check

distress sale, post-harvest loans for storage in accredited warehouses against Negotiable Warehouse Receipts (NWRs) are available for upto 6 months for KCC holding small & marginal farmers. During the year 2016-17, the volume of short term crop loan lent stood at Rs.6,22,685 crore, surpassing the target of Rs. 6,15,000 crore.

### **Government mulls Bill to deal with financial sector crisis, protect consumers**

The Union Cabinet has approved the proposal to introduce a Financial Resolution and Deposit Insurance Bill, 2017.

#### **Highlights of the Bill:**

- The Bill would provide for a comprehensive resolution framework for specified financial sector entities to deal with bankruptcy situation in banks, insurance companies and financial sector entities.
- The Bill when enacted, will pave the way for setting up of the Resolution Corporation. It would lead to repeal or amendment of resolution-related provisions in sectoral Acts as listed in Schedules of the Bill.
- It will also result in the repealing of the Deposit Insurance and Credit Guarantee Corporation Act, 1961 to transfer the deposit insurance powers and responsibilities to the Resolution Corporation.
- The Resolution Corporation would protect the stability and resilience of the financial system; protecting the consumers of covered obligations up to a reasonable limit; and protecting public funds, to the extent possible.
- The bill also seeks to give comfort to the consumers of financial service providers in financial distress. It also aims to inculcate discipline among financial service providers in the event of financial crises by limiting the use of public money to bail out distressed entities.

#### **What's up with Bosphorus?**

A sudden change in the colour of the Bosphorus Strait that divides the continents of Europe and Asia in Turkey's largest city Istanbul since the weekend has alarmed some residents.

#### **Bosphorus Strait:**

It is a natural strait connecting the Black Sea to the Sea of Marmara, thus being a very strategic waterway. It's length is 32 kilometers (20 miles) in the north to south direction. Bosphorus strait separates the European part from the Asian part of Istanbul.

#### **Reason behind colour change:**

The cause was a surge in numbers of the micro-organism *Emiliana huxleyi*. One of the most successful life-forms on the planet, *Emiliana huxleyi* is a single-celled organism visible only under a microscope. Its astonishing adaptability enables it to thrive in waters from the equator to the sub-Arctic.

#### **Rescue wards for injured animals:**

- In an attempt to reduce the number of deaths of endangered wildlife in Thar desert, new "rescue wards" have come up in the far-flung rural areas of Jodhpur, Rajasthan. These will provide quick treatment to animals injured in road accidents, dog bites, etc.
- Need for rescue wards: With an average of nearly 1,000 injuries a year, the wildlife in Thar desert has witnessed 60% mortality because of lack of transport to the main rescue centre at the Jodhpur zoo. This has led to the depletion of wildlife, mainly chinkaras (Indian gazelles).

#### **NASA's Orion spacecraft passes key safety tests**

NASA's **Orion spacecraft** – designed to take astronauts to deep space destinations such as the Moon and Mars – has successfully completed a series of tests for its critical safety systems. Researchers tested **the abort motor** for Orion's launch abort system.

#### **Know about the abort system:**

The launch abort system is an important part of **making sure crew members stay safe on the launch pad and on their way to space.**

- The **launch abort system is positioned on top of the Orion crew module** and will play a critical role protecting future crews travelling to deep space destinations in Orion.
- The abort motor is responsible for propelling the crew module away from the Space Launch System rocket in

case of an emergency, and one of three total motors that will send the crew module to a safe distance away from a failing rocket and orient it properly for a safe descent into the Atlantic Ocean if such a situation ever occurs

#### About Orion:

NASA's Orion spacecraft is built to **take humans farther than they've ever gone before**. Orion will serve as the exploration vehicle that will carry the crew to space, provide emergency abort capability, sustain the crew during the space travel, and provide safe re-entry from deep space return velocities. Orion will launch on NASA's new heavy-lift rocket, the Space Launch System.

#### India top remittance-receiving country in 2016: UN report

The report of the 'One Family at a Time' study by the **UN International Fund for Agricultural Development (IFAD)** has been released. It **talks about the foreign remittances**. The study is the first-ever of a 10-year trend in migration and remittance flows over the period 2007-2016.

#### Performance of India:

India has become **the top remittance-receiving country surpassing China in 2016**. Indians working across the globe sent home USD 62.7 billion last year.

#### Global scenario:

- About 200 million migrants globally sent more than \$445 billion in 2016 as remittances to their families, helping to lift millions out of poverty.
- Remittance flows have grown over the last decade at a rate averaging 4.2% annually, from \$296 billion in 2007 to \$445 billion in 2016.
- **80% of remittances are received by 23 countries, led by India, China, the Philippines, Mexico and Pakistan.**
- India was the top receiving country for remittances in 2016 at \$62.7 billion, followed by China (\$61 billion), the Philippines (\$30 billion) and Pakistan (\$20 billion).
- **The top 10 sending countries account for almost half of annual flows, led by the US, Saudi Arabia and Russia.**

- **Asia is the highest originating region with 77 million migrants;** with 48 million remaining within the region. Over the past decade, remittances to Asia and the Pacific increased by 87 per cent, reaching \$244 billion, while migration grew by only 33% in comparison.

- Asia remains the main remittance-receiving region, with 55% of the global flows and 41% of total migrants. It is projected that an estimated \$6.5 trillion in remittances will be sent to low and middle-income countries between 2015 and 2030.

#### Importance of remittances:

Migration flows and remittances are having large-scale impacts on the global economy and political landscape. Total migrant earnings are estimated at \$3 trillion annually, approximately 85 per cent of which remains in the host countries. The money sent home averages less than one per cent of their host's GDP. Taken together, these individual remittances account for more than three times the combined official development assistance (ODA) from all sources, and more than the total foreign direct investment to almost every low—and middle-income country.

Currently, about 200 million migrant workers support some 800 million family members globally. In 2017, an expected one-in-seven people globally will be involved in either sending or receiving more than \$450 billion in remittances.

#### UN approves creation of new office on counter-terrorism

The UN General Assembly has approved the establishment of **a new office to coordinate counter-terrorism efforts**, a move welcomed by India as a "much awaited first step" that will align the world body with needs of the global community in the fight against the menace.

#### What you need to know about the new office on counter-terrorism?

Under the new structure, the Counter-Terrorism Implementation Task Force Office (CTITF) and the UN Counter-Terrorism Centre (UNCCT), currently in the UN Department of Political Affairs (DPA) will be transferred to the new office, together with their existing staff and all associated regular and extra-budgetary resources.

- The Secretary-General had proposed that the **new Under-Secretary-General would Chair the Task Force and Executive Director of the UN Counter-Terrorism Centre.**

#### The Office would have five main functions:

- Provide leadership on the General Assembly counter-terrorism mandates entrusted to the Secretary-General from across the United Nations system.
  - Enhance coordination and coherence across the 38 Counter-Terrorism Implementation Task Force entities to ensure the balanced implementation of the four pillars of the UN Global Counter-Terrorism Strategy.
  - Strengthen the delivery of United Nations counter-terrorism capacity-building assistance to Member States.
  - Improve visibility, advocacy and resource mobilization for United Nations counter-terrorism efforts.
  - Ensure that due priority is given to counterterrorism across the United Nations system and that the important work on preventing violent extremism is firmly rooted in the Strategy.
- The report also noted India's continual improvement in terms of investment, tertiary education, quality of its publications and universities, its information and communication technology (ICT) services exports and innovation clusters.
  - **Among India's neighbours, Sri Lanka took the 90th spot whereas Nepal was at 109th. Pakistan came in at 113 followed by Bangladesh at 114.**
  - India performed well across a number of parameters, coming to the top spot in ICT services exports. It is ranked 10th in category of graduates in science and engineering, 27th on e-participation, 14th on the presence of global research and development companies, 33rd on government's online service, 32nd in general infrastructure, 18th on creative goods exports, 30th on knowledge impact and 29th on intellectual property payments.
  - India is 2nd in innovation quality for the second consecutive year. India outperformed on innovation relative to its GDP per capita for seven years in a row. India has shown improvement in most areas, including in infrastructure, business sophistication, knowledge and technology and creative outputs.

#### Global Innovation Index 2017

The World Intellectual Property Organisation (WIPO) has released its 10th edition of **the 'Global Innovation Index (GII)'**.

#### What you need to know about Global Innovation Index (GII)?

The **Global Innovation Index (GII), co-published by World-Intellectual Property Organization (WIPO), Cornell University and INSEAD with CII as a Knowledge Partner** since inception, has been ranking world economies including India since 2007 according to their innovation capabilities and outcomes using 82 indicators among a host of other important parameters. It has established itself as both a leading reference on innovation and a 'tool for action' for policy makers.

#### Performance of India and its neighbours:

- **India's position in the 2017 Global Innovation Index has moved up six ranks from last year to 60.** The country has also proven itself to be the rising innovation centre of Asia by taking the top spot in central and southern Asia.

#### Top performers:

Switzerland, Sweden, the Netherlands, the US and UK retained their top spots as the most-innovative countries.

#### India re-elected to UN body on economic, social issues; Pakistan loses out

India has been re-elected to the **UN's principal organ on economic, social and environmental issues** for another three-year term. India was among 18 nations to win election to the Economic and Social Council (ECOSOC). India obtained 183 votes, the second highest after Japan in the Asia Pacific category. Election to fill the 18 vacancies in ECOSOC.

#### Elected members:

Having obtained the required two-thirds majority, the nations elected members of ECOSOC for a three-year term beginning January 1 2018 are Belarus, Ecuador, El Salvador, France, Germany, Ghana, India, Ireland, Japan, Malawi, Mexico, Morocco, Philippines, Spain, Sudan, Togo, Turkey and Uruguay.

### What you need to know about ECOSOC?

ECOSOC, one of the six main organs of the United Nations, is **the principal body for coordination, policy review, policy dialogue and recommendations on economic, social and environmental issues, as well as for implementation of the internationally agreed development goals.**

#### Members:

The Council's **54 member Governments are elected by the General Assembly for overlapping three-year terms.** Seats on the Council are allotted based on geographical representation with 14 allocated to African states, 11 to Asian states, 6 to Eastern European states, 10 to Latin American and Caribbean states, and 13 to Western European and other states.

#### Nitty-gritty of bankruptcy code

Reserve Bank of India's internal advisory committee (IAC) has identified 12 accounts, which account for 25% of non-performing assets of the Indian banking system for immediate resolution under the Insolvency and Bankruptcy Code (IBC). The gross bad debt in the banking system as on March was <sup>1</sup> 7.11 lakh crore, which means the 12 accounts contribute to about <sup>1</sup> 1.78 lakh crore.

- RBI has hinted that stress was coming from sectors such as power, telecom, steel, textiles and aviation.

#### What does bankruptcy mean?

A company is bankrupt if it is unable to repay debts to its creditors (banks, suppliers etc). The inability to repay debts by some of the Indian firms has resulted in a huge pile of non-performing assets for the banking system. A mechanism to free up the money stuck as bad loans is one of the key for the banking system. IBC is seen as one such.

#### How the RBI came into the picture of referring accounts for resolution under IBC?

The government had recently amended the RBI Act, which gave powers to the central bank to direct banks to take punitive action against individual accounts under IBC.

### How does the process work under IBC?

To begin with any creditor including banks can start bankruptcy proceedings against defaulters by filing a petition with the National Company Law Tribunal.

- After that, an insolvency professional with significant powers is appointed to take control of the defaulting company and assist the process.
- A creditors committee is formed to represent the interest of lenders and any other party that have been affected due to the default by the company.
- The committee should come up with a resolution plan (which may include selling off defaulted loans or liquidate the company outright). The resolution would require a nod from 75% of the creditors on the committee.
- The insolvency professional gets 180 days to come up with a feasible solution on the default issue. The timeline can be extended by another 90 days. If no solution is found within 270 days, a liquidator is appointed. The company can also opt for voluntary liquidation by a special resolution in a general meeting.

#### National Mission on Cultural Mapping of India

The implementation of the "National Mission on Cultural Mapping of India" was recently launched at Goverdhan Block, Mathura District, Uttar Pradesh. This Mission is part of the 'Ek Bharat Shreshtha Bharat' umbrella. Ministry of Culture launched it in the year of commemoration of the birth centenary of Pandit Deen Dayal Upadhyay, who hailed from Mathura.

#### What you need to know about National Mission on Cultural Mapping of India?

The mission aims at converting the vast and widespread cultural canvas of India into an objective cultural map, designing a mechanism to fulfil the aspirations of the whole artist community of the nation and preserving the rich cultural heritage of this country in the form of a cultural repository of artists and art forms.

- This Mission encompasses data mapping, demography building formalising the processes and bringing all the cultural activities under one web based umbrella for better results.

- The Mission also seeks to open a direct channel of communication of artists with the Government and peer to peer communication among artists for talent honing and handholding of each other.
- TO CREATE an environment which promotes learning between States by sharing best practices and experiences.

#### **Final raising of Sardar Sarovar Dam cleared by Narmada Control Authority**

**Narmada Control Authority (NCA)** has cleared the final raising of Sardar Sarovar Dam (SSD) in Gujarat by lowering of gates and impounding of water in the reservoir upto its Full Reservoir Level (FRL) of EL 138.68 mts.

#### **Know about Ek Bharat Shreshtha Bharat:**

“Ek Bharat Shreshtha Bharat” was announced by Hon’ble Prime Minister on 31st October, 2015 on **the occasion of the 140th birth anniversary of Sardar Vallabhbhai Patel**. Subsequently, the Finance Minister announced the initiative in his Budget Speech for 2016-17.

- Through this innovative measure, the knowledge of the culture, traditions and practices of different States & UTs will lead to an enhanced understanding and bonding between the States, thereby strengthening the unity and integrity of India.
- **All States and UTs will be covered under the programme.** There will be pairing of States/UTs at national level and these pairings will be in effect for one year, or till the next round of pairings. The State/UT level pairings would be utilized for state level activities. District level pairings would be independent of the State level pairings.
- The activity will be very useful to link various States and Districts in annual programmes that will connect people through exchanges in areas of culture, tourism, language, education trade etc. and citizens will be able to experience the cultural diversity of a much larger number of States/UTs while realising that India is one.
- With lowering of gates of SSD, the live storage capacity would increase from 1565 to 5740 MCM i.e. by 4175 MCM (267%).
- The clean (hydro-power generation) would increase by present 1300 MW to 1450 MW with increase in annual generation by about 1100 Million Units (i.e. about Rs.400/- crore per annum).
- In addition, this additional storage would irrigate about 8 lakh hectares. Additionally, about one crore population would get assured drinking water.
- As it is well known, the Sardar Sarovar Project would primarily meet the water requirement of drought prone and desert areas of Gujarat and Rajasthan.

#### **Implications of this move:**

#### **Know about Narmada Control Authority:**

The **Narmada Control Authority (NCA)** has been setup under the final orders and decision of the **Narmada Water Disputes Tribunal (NWDT)** as a machinery for implementation of its directions and decision. The authority started functioning from 20th December, 1980. **The authority is a body corporate with representatives of the four States of Madhya Pradesh, Gujarat, Maharashtra, Rajasthan and representatives of Govt. Of India.** The authority is funded in equal proportions by all the four states. Secretary (Water Resources), Govt. of India is the ex-officio Chairman of the Authority, whereas the routine administration is the responsibility of Executive Member of the Authority. NCA presently has six subgroups. The Narmada Control Authority has its headquarters at Indore.

#### **The broad objectives of the initiative are as follows:**

- To CELEBRATE the Unity in Diversity of our Nation and to maintain and strengthen the fabric of traditionally existing emotional bonds between the people of our Country;
- To PROMOTE the spirit of national integration through a deep and structured engagement between all Indian States and Union Territories through a year-long planned engagement between States;
- To SHOWCASE the rich heritage and culture, customs and traditions of either State for enabling people to understand and appreciate the diversity that is India, thus fostering a sense of common identity;
- TO ESTABLISH long-term engagements and

### Anti-profiteering panel to levy penalty, have sunset date

The GST Council, chaired by Union Finance Minister Arun Jaitley and comprising state finance ministers as members, has approved the anti-profiteering rules. As per this, a five-member **anti-profiteering authority will be set up to decide on levying penalty** if businesses do not pass on the benefit of price reduction to consumers under the goods and services tax regime.

#### What you need to know about the Anti-profiteering authority:

**The authority will be headed by a retired secretary-level officer.** As per the structure, the complaints of profiteering would first come to the Standing Committee comprising tax officials from states and the Centre. It would forward the complaint to the Directorate of Safeguards (DGS) for investigation, which is likely to take about 2-3 months to complete the inquiry. On completion of investigation, the report would be submitted to the anti-profiteering authority which would decide on the penalty.

#### Functions:

- It can take suo motu action, besides acting on complaints of profiteering.
- As per the norms, the authority will have a sunset date of two years and will decide on penalty to be levied.
- It would ask the businesses to refund the price reduction on a proportionate basis to consumers.
- Where the consumer cannot be identified, the amount would be credited to the consumer welfare fund.

#### Composition:

- A search-cum-selection committee will be set up for finalising the members of the anti-profiteering authority. Officials said it is likely to take about two months to finalise the members.
- Besides the chairman, the four other members of the authority will be joint secretary-level officers who have been commissioners in central excise and service tax either at the Centre or states.

### CIC says BCCI should come under the RTI Act

In its latest order, the Central Information Commission (CIC) has urged the Committee of Administrators (CoA) running the Board of Control for Cricket in India (BCCI) to bring the organisation under the RTI Act. Previously, the CIC had elaborately explained the need for making BCCI a public authority.

#### Why should BCCI come under the purview of RTI?

BCCI is a National Sports Federation for cricket, which received thousands of crores towards tax concessions. **The government had declared all the National Sports Federations (NSF)s receiving a grant of Rs. 10 lakh or more as a Public Authority under Section 2(h) of the RTI, 2005.** Thus, it has to come under the RTI in order to remain accountable to the public.

#### RTI Act:

Right to Information Act 2005 mandates timely response to citizen requests for government information. It replaces the erstwhile Freedom of information Act, 2002.

- Under the provisions of the Act, any citizen may request information from a “public authority” (a body of Government or “instrumentality of State”) which is required to reply expeditiously or within thirty days.
- The Act also requires every public authority to computerise their records for wide dissemination and to proactively certain categories of information so that the citizens need minimum recourse to request for information formally.
- The Act covers the whole of India except Jammu and Kashmir, where J&K Right to Information Act is in force.
- Private bodies are not within the Act’s ambit directly. In a decision of Sarbajit Roy versus Delhi Electricity Regulatory Commission, the Central Information Commission affirmed that privatised public utility companies continue to be within the RTI Act.

#### CIC:

The Central Information Commission (CIC) is set up under the Right to Information Act and is the authorised body, established in 2005, under the Government of India.

- The Chief Information Commissioner heads the Central Information Commission. CIC hears appeals from information-seekers who have not been satisfied by the public authority, and also addresses major issues concerning the RTI Act.

The Chief Information Commissioner and Information Commissioners are appointed by the President on the recommendation of a committee consisting of:

- The Prime Minister, who shall be the Chairperson of the committee.
- The Leader of Opposition in the Lok Sabha.
- A Union Cabinet Minister to be nominated by the Prime Minister.

#### **National Medical and wellness Tourism Board:**

The Third Meeting of the National Medical and Wellness Tourism Board was recently held under the chairmanship of Dr Mahesh Sharma, Minister of State (Independent Charge) for Tourism and Culture.

#### **Know about National Medical and Wellness Tourism Board:**

The National Medical and Wellness Tourism Board was constituted under the Chairmanship of the Minister for Tourism in October 2015 to provide dedicated institutional framework to take forward Medical Tourism and position India as competent and credible medical and well tourism destination.

#### **National Council of Senior Citizens (NCSrC):**

Minister for Social Justice and Empowerment chaired the recently held 'Second Meeting of National Council of Senior Citizens (NCSrC)' organized by the Ministry of Social Justice and Empowerment.

#### **Know about NCSrC:**

In pursuance of the National Policy for Older Persons (NPOP), a National Council for Older Persons (NCOP) was constituted in 1999 under the Chairpersonship of the Minister for Social Justice and Empowerment to oversee implementation of the Policy.

#### **Functions:**

- The NCOP is the highest body to advise the Government in the formulation and implementation of policy and programmes for the aged. In order to have a definite structure as well as regional representation, the National Council for Older Persons (NCOP) was reconstituted and renamed as National Council of Senior Citizens (NCSrC) in 2012.
- The NCSrC advises Central and State Governments on the entire gamut of issues related to welfare of senior citizens and enhancement of their quality of life.
- Chairman and Vice-chairman: The Minister for Social Justice and Empowerment is the Chairman and Minister of State (Social Justice and Empowerment) is the Vice-Chairman of the Council.
- Members: The members of the Council includes Secretary (SJ&E), Joint Secretary (Social Defence), related central ministries such as Finance, Rural Development, Home Affairs, Law and Justice, Human Resource Development etc., National Commissions like NHRC, NCW etc., State Governments (on rotation), Oldest member of the Lok Sabha, Oldest member of the Rajya Sabha, along with representatives of Senior Citizens Associations, Pensioners' Associations, eminent senior citizens working on issues related to senior citizens etc.

#### **Environmental Impact Survey:**

India has been placed at a lowly 75th rank in the environmental impact survey.

About the survey: The study by UK-based MoneySuperMarket highlights the individual contribution to the world's climate while also highlighting areas for improvement for each country. The rankings were based on different measurements that make up the average individual human impact in each country, including energy consumption, air pollution, waste production and reliance on non-renewable energy.

#### **Performance of other countries:**

- Mozambique, the southern African country rated as one of the poorest, has topped. Mozambique topped the list because almost all its energy use comes from green sources.

- Four other African countries – Ethiopia, Zambia, Kenya and Ghana – in the top seven for lowest environmental impact.
- Africa as a continent topped the charts and featured strongly in its use of green energy, low CO2 emissions and low levels of air pollution and waste production.
- Worst country for environmental impact: Trinidad and Tobago topped this list as the CO2 emissions, in the country, are at an average of 37.1 tonnes per person.

### BIO International Convention

The Biotechnology Innovation Organization (BIO) BIO 2017 is being held in the San Diego Convention Centre, San Diego. India is also taking part in the convention.

What you need to know about the BIO International Convention?

The BIO International Convention is **the largest global event for the biotechnology industry** and attracts the biggest names in biotech, offers key networking and partnering opportunities, and provides insights and inspiration on the major trends affecting the industry. The first BIO International Convention was held in 1993 and attracted approximately 1,400 attendees.

- The event features keynotes and sessions from key policymakers, scientists, CEOs, and celebrities. The Convention also features the BIO Business Forum (One-on-One Partnering), hundreds of sessions covering biotech trends, policy issues and technological innovations, and the world's largest biotechnology exhibition – the BIO Exhibition.
- The BIO International Convention is **hosted by the Biotechnology Innovation Organization (BIO)**. BIO represents **more than 1,100 biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations**. BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products.

### Significance of the convention:

BIO performs many services for members, but none of them are more visible than the BIO International Convention.

The BIO International Convention helps BIO fulfill its mission to help grow the global biotech industry. Profits from the BIO International Convention are returned to the biotechnology industry by supporting BIO programs and initiatives. BIO works throughout the year to create a policy environment that enables the industry to continue to fulfill its vision of bettering the world through biotechnology innovation.

The key benefits of attending the BIO International Convention are access to global biotech and pharma leaders via BIO One-on-One Partnering, exposure to industry thought-leaders with over 1,500 education sessions at your fingertips, and unparalleled networking opportunities with 16,000+ attendees from 76 countries. India is taking part in the BIO 2017.

### India ratifies United Nations TIR Convention

India has become **the 71st country to ratify the United Nations TIR (Transports Internationaux Routiers) Convention**, a move that will help boost trade through smoother movement of goods across territories.

- The ratification is a part of India's multi-modal transport strategy that aims to integrate the economy with global and regional production networks through better connectivity.

### Background:

The Union Cabinet had approved India's accession to the Customs Convention on International Transport of Goods under cover of TIR Carnets (TIR Convention) in March this year.

### What you need to know about the TIR convention?

The **Customs Convention on International Transport of Goods under cover of TIR Carnets, 1975 (TIR Convention)**, is an international transit system under the auspices of the **United Nations Economic Commission for Europe (UNECE)** to facilitate the seamless movement of goods within and amongst the Parties to the Convention. At present there are 70 parties to the Convention, including the European Union.

- The 1975 convention replaced the TIR Convention of 1959, which itself replaced the 1949 TIR Agreement between a number of European countries.

- The TIR system not only covers customs transit by road but a combination is possible with other modes of transport (e.g., rail, inland waterway, and even maritime transport), as long as at least one part of the total transport is made by road.

#### Benefits for India:

- India's decision to implement the TIR system will have far reaching benefits for trade and will save significant time and money by streamlining procedures at borders, reducing administration and cutting border waiting times.
- The TIR Convention will also facilitate India's current national and multilateral connectivity-related initiatives to improve cross border road transport, facilitating overland trade integration with both eastern and western neighbours.
- It will also help India in implementing the World Trade Organization's Trade Facilitation Agreement, which entered into force this year.
- The Convention will help Indian traders to have access to fast, easy, reliable and hassle free international system for movement of goods by road or multi-modal means across the territories of other contracting parties.
- By joining the convention, the need for inspection of goods at intermediate borders as well as physical escorts en route shall be obviated due to reciprocal recognition of Customs controls.

#### NASA finds 10 Earth-sized exoplanets

NASA's Kepler mission team has released a survey of 219 potential exoplanets — planets outside of our solar system — that had been detected by the space observatory launched in 2009 to scan the Milky Way galaxy.

#### Key facts:

- Ten of the new discoveries were orbiting their suns at a distance similar to the Earth's orbit around the sun, the so-called habitable zone that could potentially have liquid water and sustain life.
- Kepler has already discovered 4,034 potential exoplanets, 2,335 of which have been confirmed by other telescopes as actual planets. The 10 new Earth-size planets bring the total to 50 that exist in habitable zones around the galaxy.

- Of the 10 newly discovered Earth-size planets, one is the closest to Earth in size and the distance to its host star. But researchers don't know much more than that.

#### What you need to know about Exoplanets?

An exoplanet is a planet outside our solar system, usually orbiting another star. They are also sometimes called "extrasolar planets", "extra-" implying that they are outside of our solar system.

#### What is the habitable zone?

If a planet is too close to the star it orbits, any water on the surface quickly boils off, forming a steam atmosphere. If the planet is too far from the star, any water on the surface freezes.

- The **habitable zone (or "Goldilocks zone")** is the range of orbital distances from a star at which liquid water can exist on the surface of a planet.

- This range of distances changes depending on the size and temperature of the star.

- Earth is in the habitable zone of the sun – one of the reasons our planet has liquid water like oceans and lakes.

#### India Re-Nominates Dalveer Bhandari For Another Term As Judge At International Court of Justice

India has re-nominated Justice Dalveer Bhandari as its candidate for another term as judge at the International Court of Justice or ICJ, the principal judicial organ of the United Nations or UN.

#### Judges at ICJ:

The **ICJ consists of 15 judges elected to nine-year terms by the United Nations General Assembly and the Security Council that vote simultaneously but separately.**

#### Eligibility criteria:

In order to be elected, **a candidate must receive an absolute majority of the votes in both bodies (UNSC and UNGA).**

- Judges will be elected from among persons of high moral character, who possess the qualifications required in their respective countries for appointment to the highest judicial offices, or are jurisconsults of recognised competence in international law.

- **Judges are chosen on the basis of their qualifications, not their nationality, but no two judges can be from the same nationality.** Effort is also taken to ensure that the principal legal systems of the world are reflected in the composition of the court.

#### Know about ICJ:

The International Court of Justice (ICJ) is **the principal judicial organ of the United Nations (UN)**. It was established in June 1945 by the Charter of the United Nations and began work in April 1946.

- The seat of the Court is at the Peace Palace in The Hague (Netherlands).
- Of the six principal organs of the United Nations, it is the only one not located in New York (United States of America).
- The Court's role is to settle, in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.
- **Its judgments have binding force and are without appeal for the parties concerned.**

#### Government, RBI in talks to postpone Basel-III norms for banks

The government is in talks with the Reserve Bank of India, in a bid to postpone the implementation of the international capital norms or Basel-III norms in the Indian banking sector, which is struggling with the issue of surmounting bad debts. It has been made mandatory for the banks to abide by the Basel-III regulatory norms by March 2019.

- The extension of the last date to meet the capital needs will provide the banks an opportunity to increase their lending while they settle their bad loans tussle and also raise capital.

#### Background:

Basel III (or the Third Basel Accord) is a global, voluntary regulatory framework on bank capital adequacy, stress testing, and market liquidity risk. It was agreed upon by the members of the Basel Committee on Banking Supervision in 2010–11.

The **third installment of the Basel Accords (see Basel I, Basel II) was developed in response to the deficiencies in financial regulation revealed by the financial crisis of 2007–08.** Basel III is intended to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage.

#### China offers to build dam in Gilgit-Baltistan that ADB, World Bank refused to fund

China has offered to make a **dam (Diamer-Bhasha Dam)** project on the Indus River that India objects to, a part of the China-Pakistan Economic Corridor (CPEC).

#### Background

The Diamer-Bhasha Dam is a project that both the World Bank and the Asian Development Bank (ADB) have refused to touch because India objects to its location, which is in the Gilgit-Baltistan region. India claims the region is a part of Kashmir. A little over a year ago, the US was making noises about supporting the project and India didn't shy away from showing it was peeved.

- Two years ago, the World Bank refused to come on board as a lender for the dam project, because Pakistan didn't want to seek a no-objection certificate from India for the project. And last November, the ADB too declined to fund what's said to be a \$14 billion project.

#### About the project:

The Diamer-Bhasha Dam was first announced in 2006 and the foundation stone for it was laid in 2011. Pakistan envisages the dam project will generate 4,500 megawatts of electricity, Reuters reported earlier this month. A vast new reservoir is also expected to regulate the flow of water to farmland that is vulnerable to increasingly erratic weather patterns.

#### Why is India concerned?

Gilgit-Baltistan is treated as a separate geographical entity by Pakistan. It has a regional Assembly and an elected Chief Minister. It is believed that China's concerns about its unsettled status prompted the move, which could signal a historic shift in the country's position on the future of the wider Kashmir region.

Gilgit-Baltistan shares a geographical boundary with Pakistan-occupied Kashmir, and India considers it as part

of the undivided Jammu and Kashmir, while Pakistan sees it as a separate from PoK. The USD 46 billion China-Pakistan Economic Corridor (CPEC) also passes through this region.

### Where is Gilgit Baltistan located?

It is located in the northern Pakistan. It borders China in the North, Afghanistan in the west, Tajikistan in the north west and Kashmir in the south east.

Gilgit-Baltistan is home to five of the “eight-thousanders” and to more than fifty peaks above 7,000 metres (23,000 ft). Three of the world’s longest glaciers outside the polar regions are found in Gilgit-Baltistan.

### India’s First Indigenously Built Floating Dock Goes On Stream:

- The country’s first indigenously built floating dock FDN-2 for the Indian Navy was recently launched at the L&T Shipbuilding Yard at Kattupalli near Chennai.
- The floating dock will be delivered to Indian Navy, Port Blair in the coming months after undergoing a series of “harbour trials”.
- The Floating Dock is an indigenously built designed and built platform with state-of-the-art machinery and control systems capable of docking ships of upto 8,000 tonne displacement. The dock covers facilitate “repair” and “refit” activities even in inclement weather conditions.
- Once operationalised, the dock would enhance the technical repair infrastructure of the Navy for ships based at the Andaman and Nicobar Islands as well as for visiting Naval ships.

### Second edition of Slum Daud

The second edition of **the Slum Daud** was recently inaugurated.

### What is Slum Daud?

The **Slum Yuva Daud** is part of the **Adopt Slum Campaign** initiated by the **Ministry of Youth Affairs & Sports** and **Nehru Yuva Kendra Sangathan**. The Slum Yuva Daud & Adopt Slum campaigns aim at highlighting the government’s pro-people schemes among masses.

**Participation: the campaign will involve groups like NSS, public schools, RWAs, NGOs, rotary clubs etc.**

### NYKS:

Nehru Yuva Kendras were established in the year 1972 with **the objective of providing rural youth avenues to take part in the process of nation building as well providing opportunities for the development of their personality and skills.**

In the year 1987-88, Nehru Yuva Kendra Sangathan(NYKS) was set up **as an autonomous organization under the Government of India, Ministry of Youth Affairs and Sports**, to oversee working of these Kendras.

- NYKS is the largest grassroots level youth organization; one of its kind in the world. It channelizes the power of youth on the principles of voluntarism, self-help and community participation.
- The basic objective for creation of youth clubs is to render community support through developmental initiatives involving activities with particular focus on youth empowerment.

### First train that runs on virtual tracks

China has unveiled **the world’s first train that runs on virtual tracks**. The new train is part of China’s attempts to develop “intelligent rail express system”.

### Key facts:

- Instead of railway tracks, the train runs on rubber tyres. The train can move at a maximum speed of 70 km/hour.
- The Autonomous Rail Transit (ART) system is fitted with sensors that detect the dimensions of the road. This enables the vehicle to follow routes without the need for metal rails.
- The 30-metre train has three carriages as of now and can carry 300 passengers. More carriages can be added – taking the total capacity up to 500 passengers.
- The new train is equipped with sensors that allow it to “read the dimensions of roads” and plan its own route.
- The train is powered by electricity as well, making it environment-friendly. On a full charge, the train can travel for distances up to 40 km.

### NASA Tests Flexible Roll-Out Solar Array on Space Station

NASA's new compact high-power solar array—the **Roll Out Solar Array (ROSA)**— has made its debut on the International Space Station, allowing astronauts to test the technology's durability for deep-space missions.

#### What you need to know about ROSA?

The Roll Out Solar Array (ROSA) is one of the options eyed by NASA **that could power an advanced solar electric propulsion spacecraft** that makes possible such endeavors as the agency's Asteroid Redirect Mission—plucking a multi-ton boulder from an asteroid's surface, and then maneuvering that object into a stable orbit around the moon for human inspection and sampling.

#### Significance of ROSA:

- The Roll-Out Solar Array (ROSA) is a new type of solar panel that rolls open in space like a party favor and is more compact than current rigid panel designs.
- Tapping into ROSA technology allows the conversion of sunlight into electrical power that drives the ion thrusters of a solar electric propulsion spacecraft.
- ROSA is expected to enable a number of space initiatives and is a cost-saving plus to transport cargo over long distances beyond the Earth.
- ROSA has the potential to replace solar arrays on future satellites, making them more compact and lighter weight. Satellite radio and television, weather forecasting, GPS and other services used on Earth would all benefit from high-performance solar arrays.

#### SEBI eases norms to buy stressed assets

As part of the larger attempts of the government to resolve the massive bad debt issue, the Securities and Exchange Board of India (SEBI) has relaxed norms for investors acquiring assets in companies with stressed assets and facing bankruptcy proceedings.

#### The new norms are as follows:

- The acquirers are exempted from making open offers after buying stakes from lenders. Checks such as a three-year lock-in for new investors have been included.

- A similar exemption has also been provided for acquisitions post the resolution plans approved by National Company Law Tribunal (NCLT) under the Insolvency and Bankruptcy Code 2016.
- A 'Regulatory Fee' of \$1,000 will also be levied on each subscriber of offshore derivative instrument (ODI), which will have to be collected by the registered foreign portfolio investor (FPI) that issues the ODIs.

#### What are stressed assets?

**Non-performing assets, restructured loans and written-off assets — are collectively called 'stressed assets'.** They have become a major challenge to the country's banking system.

#### India's population to surpass that of China's around 2024: UN

**The World Population Prospects: The 2017 Revision, published by the UN Department of Economic and Social Affairs,** was recently released. The 2017 Revision of World Population Prospects is the 25th round of official UN population estimates and projections.

#### Highlights of the report:

- According to the UN forecast, India's population could surpass that of China's around 2024, two years later than previously estimated, and is projected to touch 1.5 billion in 2030. Currently China with 1.41 billion inhabitants and India with 1.34 billion remain the two most populous countries, comprising 19 and 18% of the total global population.
- The population of China is projected to remain stable until the 2030s, after which it may begin a slow decline. India's population may eventually see a decline in the half century after 2050 to 1.51 billion by 2100 but it will still be the most populous country in the world.
- In India, life expectancy at birth will be 71 years in 2025-2030, growing to 74.2 years in 2045-2050. The under-five mortality rate will decline from 32.3 deaths under age five per 1,000 live births in 2025-2030 to 18.6 in 2045-2050.

**Global scenario:**

- The current world population of 7.6 billion is expected to reach 8.6 billion in 2030, 9.8 billion in 2050 and 11.2 billion in 2100.
- With roughly 83 million people being added to the world's population every year, the upward trend in population size is expected to continue, even assuming that fertility levels will continue to decline.
- Ten countries are expected to account collectively for more than half of the world's projected population increase over the period 2017-2050: India, Nigeria, Congo, Pakistan, Ethiopia, Tanzania, the United States, Uganda, Indonesia and Egypt.
- Among the ten largest countries worldwide, Nigeria is growing the most rapidly. Consequently, the population of Nigeria, currently the world's 7th largest, is projected to surpass that of the US and become the third largest country in the world shortly before 2050.
- The report said that in 2010-2015, around 46% of the world's population lived in intermediate-fertility countries, where women have on average between 2.1 and 5 births over a lifetime. Intermediate-fertility countries are found in many regions, with the largest being India, Indonesia, Pakistan, Bangladesh, Mexico and the Philippines.

**Impact of growing population:**

Large and persistent economic and demographic asymmetries between countries are likely to remain key drivers of international migration for the foreseeable future. Between 2015 and 2050, the top net receivers of international migrants (more than 100,000 annually) are projected to be the US, Germany, Canada, UK, Australia and Russia. The countries projected to be net senders of more than 100,000 migrants annually include India, Bangladesh, China, Pakistan and Indonesia.

- Population ageing is projected to have a profound effect on societies, underscoring the fiscal and political pressures that the health care, old-age pension and social protection systems of many countries are likely to face in the coming decades.

**NASA, Italian Space Agency to probe cosmic X-ray mysteries**

NASA has signed an agreement with Italian Space Agency for the launch of **the Imaging X-ray Polarimetry Explorer (IXPE) mission** that will provide important clues about the origins of cosmic X-rays, their interactions with matter and gravity as they travel through space.

**What you need to know about IXPE mission?**

Slated to launch in 2020, the Imaging X-ray Polarimetry Explorer (IXPE) **mission will help explore some of the most turbulent and extreme environments in our universe** — from the hottest, messiest star factories to violent jets screaming away from monster black holes.

- The IXPE mission will fly three telescope systems capable of measuring the polarisation of X-rays emitted by cosmic sources.

**Technical and science objectives include:**

- Improving polarization sensitivity by two orders of magnitude over the X-ray polarimeter.
- Providing simultaneous spectral, spatial, and temporal measurements.
- Determining the geometry and the emission mechanism of Active Galactic Nuclei and microquasars.
- Finding the magnetic field configuration in magnetars and determining the magnitude of the field.
- Finding the mechanism for X ray production in pulsars (both isolated and accreting) and the geometry.
- Determining how particles are accelerated in Pulsar Wind Nebulae.

**Operation Swarn:**

The Railway Ministry is to launch “Operation Swarn” **to improve services in Rajdhani and Shatabdi Express trains**. The cleanliness and quality of food suffered a lot, which is one of the main reasons that the Indian Railway authority has taken the decision to give the premium trains in India a new look. Rajdhani and Shatabdi Express are one of the train services in India, which was started for the people who can afford more money to luxurious travel.

- Under the project, the Indian Railways will focus attention on 10 key areas — punctuality, cleanliness, linen, coach interiors, toilets, catering, staff behaviour, security, entertainment, housekeeping and regular feedback.

### **Amendment of the Social Security Agreement between India and the Netherlands**

The Union Cabinet has approved Amendment of the **bilateral Social Security Agreement (SSA) between India and the Netherlands** by incorporating the “Country of Residence” Principle into the said SSA.

The circumstances where the “country of residence” principle will apply to a few instances of Indian nationals include the following:

- An Indian worker who dies in the Netherlands and has his/her spouse and children living in India.
- An Indian worker who gets disabled while working in the Netherlands and returns to India.

#### **Background:**

A bilateral Social Security Agreement, (SSA) was signed between India and the Netherlands on 22nd October 2009 and came into force on 15th June 2010.

The SSA **allows exemption from double contribution to the social security system in both jurisdictions, exportability of accumulated social security benefits across jurisdictions (applicable even to the self-employed), and totalization of serving periods.**

- Beginning 1st January 2013, a new social security legislation came into force in the Netherlands, consequent to which the Netherlands began to apply the “country of residence” principle on certain social security benefits exported to other countries.
- The principle sought, is to bring in equity in exportability of social benefits to the class of Dutch citizens who reside outside the Netherlands.
- As on date, India has signed and operationalized SSAs with 18 countries – Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Hungary, Japan, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland and South Korea.

### **NATGRID can soon access PAN, I-T records**

The Centre has empowered the National Intelligence Grid (NATGRID), the integrated mechanism to keep track of security-related data, to access the Income Tax department’s records on individual taxpayers as well as PAN card holders. NATGRID and the I-T department could sign a pact soon to operationalise the data sharing arrangement.

#### **What is NATGRID?**

NATGRID is **an ambitious counter terrorism programme**, which will utilise technologies like Big Data and analytics to study and analyse the huge amounts of data from various intelligence and enforcement agencies to help track suspected terrorists and prevent terrorist attacks. It will connect, in different phases, data providing organisations and users besides developing a legal structure through which information can be accessed by the law enforcement agencies.

#### **Background:**

NATGRID is a post Mumbai 26/11 attack measure. It aims to mitigate a vital deficiency — lack of real time information, which was considered to be one of the major hurdles in detecting US terror suspect David Headley’s movement across the country during his multiple visits between 2006 and 2009.

#### **It’s role:**

- NATGRID will become a secure centralised database to stream sensitive information from 21 sets of data sources such as banks, credit cards, visa, immigration and train and air travel details, as well as from various intelligence agencies.
- The database would be accessible to authorised persons from 11 agencies on a case-to-case basis, and only for professional investigations into suspected cases of terrorism.

#### **A law, this time for Antarctica**

India is drafting a dedicated Antarctica policy and a law that will likely be tabled in the winter session of Parliament. Ministry of Earth Sciences will draft the law.

**Background:**

India, being among the countries that have acceded to the Antarctica Treaty, is expected to have a clear policy on the consequences of its activities in the region. India is expanding its infrastructure development in Antarctica. The government is rebuilding its station, **Maitri, to make it bigger and last for at least 30 years. Dakshin Gangotri, the first Indian base established in 1984**, has weakened and become just a supply base.

**Know about Antarctic Treaty:**

The treaty is framed to ensure ‘in the interests of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.’

- To this end it prohibits military activity, except in support of science; prohibits nuclear explosions and the disposal of nuclear waste; promotes scientific research and the exchange of data; and holds all territorial claims in abeyance.
- Several related conventions, such as the Conservation of Antarctic Seals (1972) and the Conservation of Antarctic Marine Living Resources (1980), are appended to this treaty for protection.

**Cartosat-2 launch: India puts another smart eye in the sky**

India’s Polar Satellite Launch Vehicle has launched the Cartosat-2 series satellite—a dedicated satellite for defence forces—along with 30 co-passenger satellites from Sriharikota in Andhra Pradesh. This is the 40th flight of PSLV and 17th **flight of PSLV in ‘XL’ configuration (with the use of solid strap-on motors)**.

**Key facts:**

- PSLV-C38 launched the 712 kg Cartosat-2 series satellite for earth observation and 30 co-passenger satellites together, weighing about 243 kg at lift-off, into a 505-km polar sun synchronous orbit.
- The co-passenger satellites include 29 Nano satellites from 14 countries—Austria, Belgium, Chile, Czech Republic, Finland, France, Germany, Italy, Japan, Latvia, Lithuania,

Slovakia, the United Kingdom and the United States of America—besides a nano satellite from India.

- The international customer nano satellites are being launched as part of the commercial arrangements between Antrix Corporation Limited (Antrix), commercial arm of ISRO and International customers.

**Know about Cartosat-2:**

Cartosat-2 is a remote sensing satellite and it is similar in configuration to earlier satellites in the series with the objective of providing high-resolution scene specific spot imagery.

- It has a resolution of 0.6 metres, which means it can spot even smaller objects within a square of 0.6 m by 0.6 m.
- Once this satellite becomes operational, it would be handed over to the defence forces, which have their own infrastructure, which includes ground stations, and trained manpower to access data.

**Indian Naval Material Management Service (INMMS) as an Organized Group ‘A’ Engineering Service:**

The Union Cabinet has approved constitution of an organized Group ‘A’ Engineering Service, namely Indian Naval Material Management Service (INMMS) and consequent changes in cadre structure of existing Group ‘A’ cadre of Naval Store Officers of the Indian Navy.

- The proposed INMMS would attract the best talents available and will provide a reservoir of technically qualified Material Managers for handling the Materials Management functions of Indian Navy.
- It will improve the functional efficiency of Material Management of Naval Stores and ensure operational readiness of the Navy at all times as well as provide better career prospects for the incumbents.

**Uttarakhand and Haryana declared 4th and 5th ODF States in the country:**

Under the Swachh Bharat Mission Gramin (SBM-G), rural Uttarakhand and rural Haryana have declared themselves as the 4th and 5th Open Defecation Free (ODF) States of India. They have joined the league of Sikkim, Himachal Pradesh and Kerala, which were the first three states to be declared ODF. Nationally, the sanitation coverage has

increased from 42% to over 64% in just two and a half years since the launch of SBM. With the total number of ODF States now rising to 5, more than 2 Lakh villages and 147 districts have also been declared ODF across the country.

### India's biggest municipal bonds programme launched in Maharashtra:

To finance its 24x7 water supply project, the Pune Municipal Corporation has launched India's biggest municipal bonds programme. The project looks to raise Rs 2,264 crore in five years.

### What are Municipal Bonds?

Municipal bonds are debt instruments through which a corporation or municipality raises money from individuals or institutions. The civic body floating the bonds returns the principal amount on a maturity date with a specific amount of interest. There are usually two kinds of bonds – general bonds, where money is raised without mentioning the cause in particular, and revenue bonds, where funds are raised for income-generating projects and revenue from the projects is used to repay the buyers.

### 'Moncoes do Reino' (Monsoon correspondence):

These are the digital copies of 62 volumes of the collection recently handed over to the National Archives of India by the Torre do Tombo (National Archives of Portugal). These volumes were originally part of over 456 volumes that cover the period from 1568 to 1914 and form the largest of all record collections in the Goa State Archives. The collection consists of direct correspondence from Lisbon to Goa and is important primary source for the study of the Portuguese expansion in Asia, their trade rivalries with the Arabs and European powers and their relations with neighbourings Kings in South Asia and East Asia.

### Meet on preserving endangered Manipur deer held:

A workshop on how people and brow-antlered deer (Sangai), can co-exist, recently concluded in Manipur. Due to lack of funds and poaching, sangai may become extinct sooner than expected.

### Key facts on Sangai:

- The sangai is an endemic, rare and endangered subspecies of brow-antlered deer. It is also state animal of Manipur.

- The Sangai is now restricted to the Keibul Lamjao National Park (KLNP) in the Southeastern fringe of Loktak Lake in Manipur. Phumdis, floating vegetation occupy about two-third of the surface area of the lake. They feed, live and breed on this 9 km area of Phumdis.

- It is classified as "Endangered" by the IUCN.

**Ministry of Urban Development** has launched the 'City Liveability Index' for measuring the quality of life in 116 major cities including smart cities, capital cities and cities with a population of above one million each.

### What you need to know about City Liveability Index?

In a first of its kind Index to be introduced in the country, cities will be assessed on a comprehensive set of 79 parameters **to capture the extent and quality of infrastructure** including availability of roads, education and health care, mobility, employment opportunities, emergency response, grievance redressal, pollution, availability of open and green spaces, cultural and entertainment opportunities etc.

- The Index is a Common Minimum Reference Framework to enable the cities know where they stand in terms of quality of life and the interventions required to improve the same.

### 'MERIT'

A web portal- **MERIT (Merit Order Despatch of Electricity for Rejuvenation of Income and Transparency)** was recently launched by the Ministry of Power

### Key facts:

- The portal **has been developed by Ministry of Power in association with POSOCO and Central Electricity Authority.**
- The portal displays extensive array of information regarding the merit order of Electricity procured by State(s) such as daily state-wise marginal variable costs of all generators, daily source-wise power purchases of respective states/UTs with source-wise fixed and variable costs, energy volumes and purchase prices.
- The web-portal also give information regarding reasons for deviation from merit order such as must run conditions, transmission constraints etc

**The advantages of “Merit” Portal are as follows:**

- Empowerment of the Consumer and participative governance.
- Transparent information dissemination pertaining to marginal variable cost and source wise purchase of electricity.
- Promotes economy and efficiency in operations.
- Demystifies the utility portfolio and its complexity.
- Optimization of the power procurement costs.
- Facilitates renewable integration and handling of the variability and uncertainty of renewables.
- Indication of supply side reliability, adequacy, and cost of power procurement.

**Government launches VAJRA scheme**

In a bid to bring together the Indian scientists abroad and India-based researchers for conducting joint researches in India, the Department of Science and Technology (DST) has launched a scheme named ‘**Visiting Advanced Joint Research Faculty**’ (VAJRA).

**Key facts:**

- The Visiting Advanced Joint Research (Vajra) faculty scheme is a dedicated programme for foreign scientists and academicians, with emphasis on non-resident Indians, persons of Indian origin and overseas citizens of India to work as adjunct faculty in the government-funded academic and research institutions.
- Under **this scheme, scientists or senior researchers abroad – of Indian origin or otherwise – can collaborate with faculties here.**
- Under the scheme, **foreign researchers would receive endowments at par with those in their own countries.** The endowments for faculties would be US \$15,000 in the first month of residency and US \$10,000, for the remaining months.
- The idea of the scheme is to bring the best of the world to India and conduct research here. The broad areas of research like energy, health, advance material and others would be promoted under the scheme.

**M-banking now under ombudsman’s purview**

Widening the scope of its Banking Ombudsman Scheme, the Reserve Bank of India (RBI) has included complaints relating to mis-selling and mobile banking in its purview. The amended Banking Ombudsman Scheme will come into force from July 1.

**Key facts:**

- The scheme now includes deficiencies arising out of sale of insurance/mutual fund/other third party investment products by banks.
- Under the amended Scheme, a customer would also be able to lodge a complaint against the bank for its non-adherence to RBI instructions with regard to mobile banking/ electronic banking services in India.
- The pecuniary jurisdiction of the Banking Ombudsman to pass an Award has been increased from existing Rs 10 lakh to to Rs 20 lakh.
- Compensation not exceeding Rs 1 lakh can also be awarded by to the complainant for loss of time, expenses incurred as also, harassment and mental anguish suffered by the complainant.

**What is Banking Ombudsman?**

Banking ombudsman is **a quasi judicial authority**, created to resolve customer complaints against banks relating to certain services provided by them.

- The Ombudsman is **a senior official, who has been appointed by the Reserve Bank of India** to address grievances and complaints from customers, pertaining deficiencies in banking services.
- It covers **all kinds of banks including public sector banks, Private banks, Rural banks as well as co-operative banks.**

**Panel to oversee progress in UN’s SDG**

The Centre will soon set up a high-level committee headed by Chief Statistician of India to oversee the country’s progress towards UN’s Sustainable Development Goals aimed at ending poverty, fighting inequalities and tackling climate change.

- A dashboard is also being developed with technical support from the UN Development Programme (UNDP) to “strengthen the mechanism” for monitoring progress on these global goals.
- Data collected by private agencies may be considered for monitoring the SDGs, particularly since a number of the goals are not directly linked to the Centre’s provision of public services.
- Among the 11 State capitals selected were Bengaluru in Karnataka, Shimla in Himachal Pradesh, Aizawl in Mizoram and Gangtok in Sikkim. The other cities selected were Puducherry, Karnal in Haryana, Dehradun in Uttarakhand, Pimpri Chinchwad in Maharashtra, and Pasighat in Arunachal Pradesh.
- With the addition of the 30 cities, 23 States and four Union Territories have been included in the Mission.

### What are the SDGs?

The SDGs are a set of 17 goals and 169 targets aimed at resolving global social, economic and environmental problems.

- These new SDGs replace the Millennium Development Goals (MDGs) which were adopted in 2000 and expire this year.
- Aiming to encompass almost every aspect of human life, the main themes of the SDGs are ending poverty, tackling inequality and combating climate change.

According to the UN’s own estimates, achieving the 17 Sustainable Development Goals and 169 targets meant to transform the world will require over 250 billion dollars annually for the next 15 years.

### What is sustainable development?

The United Nations defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

### Centre announces 30 more Smart Cities

Thirty more cities from across the country have been added to the Centre’s Smart Cities Mission, with a proposed investment of Rs.57,393 crore in various projects under the scheme, taking the total number of cities to 90.

#### Key facts:

- Kerala’s capital, Thiruvananthapuram, topped this round.
- Tamil Nadu emerged as the State with the highest number of cities selected in this round, with Tirupur, Tirunelveli, Thootukudi and Tiruchirappalli making it to the Mission.

### Smart Cities mission:

The Smart Cities mission was launched in June 2015 with the government releasing the guidelines and mission statement for the 100 Smart Cities project.

- Under this programme, the government will provide central funding of Rs 50,802 crore to the selected cities for improving their infrastructure and service delivery through application of better technology and e-governance.
- States and Urban local Bodies (ULBs) will play a key supportive role in the development of Smart Cities. Smart leadership and vision at this level and ability to act decisively will be important factors determining the success of the Mission.

### Funding:

According to mission guidelines, the total State and Central financial assistance for each smart city would be Rs. 1,000 crore. The central government will grant every winning city a sum of Rs. 500 crore as overall cache of start-up funds and the State governments will provide an additional Rs. 500 crore.

### Carnegie Medal:

Wipro Chairman Azim Premji is among the recipients of this year’s Carnegie Medal, considered the most prestigious prize in philanthropy, for his efforts to reform India’s public school system.

- Premji is among the nine recipients recognised “for their outstanding and innovative leadership in philanthropy”.
- The Carnegie Medal of Philanthropy was established in 2001 and is awarded every two years. The recipients will be honoured in a ceremony to be held in October. The honorees are recognised as catalysts for good whose

philanthropy has had a significant and lasting impact on a particular field, nation, or community of people.

### **Prime Minister Modi and Prime Minister Costa launch unique Start-up portal**

Prime Minister Modi and Prime Minister Costa recently launched a unique startup Portal – **the India-Portugal International StartUp Hub (IPISH)** – in Lisbon.

#### **What you need to know about IPISH?**

This is a **platform initiated by Startup India and supported by Commerce & Industry Ministry and Startup Portugal** to create a mutually supportive entrepreneurial partnership.

- IPISH hosts a range of tools and will provide information on the start-up hotspots of Bangalore, Delhi and Lisbon; and on associated subjects, such as policy, taxation, and visa options. It will develop a Go-To-Market Guide to support start-ups.
- IPISH is expected to help in mutual capacity building, and enable connections between start-ups, investors, and incubators from relevant sectors. It is also expected to establish a network of honorary ambassadors based in India and Portugal to guide start-ups from both countries.

#### **Background:**

There are strong complementarities between India and Portugal in the start-up sector. Portugal has one of the highest rates of business creation in Europe and has emerged as one of the most vibrant European eco-systems for entrepreneurship. **Lisbon is also hosting the Web Summit** – a key annual international technology conference – for 3 years from 2016 onwards.

#### **States' fiscal deficit soars to Rs 4.93 trillion in FY16**

RBI has released second edition of its statistical publication titled '**Handbook of Statistics on States 2016-17**'.

- The publication follows the 'one-indicator-one table' approach and covers all sub-national statistics on socio-demographics, state domestic product, agriculture, industry, infrastructure, banking and fiscal indicators across the states over a period ranging from 1950-51 to 2016-17.

- It also offers data on state-wise availability of power, per capita availability of power, installed capacity of power, and power requirement, length of national highways, roads and state highways, and railheads.

#### **Highlights of the report:**

- Led by the most populous Uttar Pradesh and the largest Rajasthan, the gross fiscal deficits of all the states skyrocketed to Rs 4,93,360 crore in fiscal 2016 from Rs 18,790 crore in FY1991.
- Uttar Pradesh had a fiscal deficit of a paltry Rs 3,070 crore in FY91, which zoomed to Rs 64,320 crore in FY16 and but is projected to improve to Rs 49,960 crore in FY17.
- Rajasthan, which had a gross fiscal deficit of Rs 540 crore in FY91, saw it soaring to Rs 67,350 crore in FY16 and is projected to decline to Rs 40,530 crore in FY17.
- Maharashtra, one of the most urbanised and industrialised states, had a gap of Rs 1,020 crore in FY91 but the same jumped to Rs 37,950 crore in FY16 which is projected to improve to Rs 35,030 crore in FY17.
- Gujarat, which had seen rapid industrialisation during the period of data analysis, had only Rs 1,800 crore in fiscal deficit in FY91 but the same had jumped to Rs 22,170 crore in FY16 and is projected to further deteriorate in FY17 to Rs 24,610 crore.
- Reflecting its improved finances on the back of rising investments following better law and order situation, Bihar is slated to improve its finances with fiscal deficit of Rs 16,010 crore in FY17 against Rs 28,510 crore in FY16. The state which had for long been the badland of the nation had Rs 15,90 crore deficit in FY91.
- West Bengal, despite having high debt levels, has been improving its finances with its fiscal deficit projected to improve to Rs 19,360 crore in FY17 from Rs 25,180 crore a year ago and a healthy Rs 1,630 crore in FY91.

#### **Kanyashree Scheme For Girls In Bengal Wins UN Award**

The West Bengal government is among the winners to receive the prestigious **UN Public Service Award** for its initiative to combat child marriage and ensure education to the girl child in the state. The West Bengal government was among the 12 institutions from 11 countries that were

recognised by the world body on **UN Public Service Day, commemorated on June 23<sup>rd</sup>**.

- India was named first in the Asia-Pacific group for the category: 'Reaching the Poorest and Most Vulnerable through Inclusive Services and Participation'

#### Background:

West Bengal has been awarded for the '**Kanyashree Prakalpa**' initiative that sought to reduce the high child marriage rates and low female education rates in the state. Through the initiative, **cash was deposited into the bank account of girls for every year they remained in school and were unmarried**. This initiative led to a "drastic reduction in child marriage, increase in female education and female empowerment."

#### UN Public Service Awards:

The UN Public Service Awards are given by the world body to institutions from across the world for their innovation and excellence in providing public services. It highlights the pivotal role of public services in the implementation of the Sustainable Development Goals (SDGs). The Awards aim at discovering innovations in governance; reward excellence in the public sector; motivate public servants to further promote innovation; enhance professionalism in the public service; raise the image of public service; enhance trust in government; and collect and disseminate successful practices for possible replication.

The **UN Public Service Day** is celebrated every year to recognise public service innovations and excellence that have led to more effective and inclusive public service delivery contributing to the achievement of the SDGs in countries worldwide.

#### EC disqualifies Minister in M.P.

The Election Commission has disqualified Narottam Mishra, Minister in the Madhya Pradesh government from membership of any State legislature and contesting polls for the next three years for filing wrong accounts of election expenditure.

#### What you need to know about the issue?

#### Powers of election commission to disqualify:

Membership of the minister was revoked **under section 10A of the Representation of the People Act, 1951**, to be read with Sections 77 and 78 of the Act. This relates to **providing wrong information to the Commission on expenses incurred during the polls**.

#### Advisory Jurisdiction & Quasi-Judicial Functions of Election Commission

Under the Constitution, the Commission also has advisory jurisdiction in the matter of post election disqualification of sitting members of Parliament and State Legislatures. Further, the cases of persons found guilty of corrupt practices at elections which come before the Supreme Court and High Courts are also referred to the Commission for its opinion on the question as to whether such person shall be disqualified and, if so, for what period. The opinion of the Commission in all such matters is binding on the President or, as the case may be, the Governor to whom such opinion is tendered.

- The Commission has the power to disqualify a candidate who has failed to lodge an account of his election expenses within the time and in the manner prescribed by law. The Commission has also the power for removing or reducing the period of such disqualification as also other disqualification under the law.

#### Yettinahole hits a hurdle in coffee land

The ongoing land acquisition for the Yettinahole drinking water project has hit a hurdle with some farmers unhappy with the price chart fixed by the district committee and are refusing to part with land. Though the Karnataka Cabinet approved direct acquisition as a special case to speed up the process, this could mean a slowdown.

#### Background:

Karnataka Neeravari Nigam Ltd. (KNNL) is currently acquiring land in Sakleshpur taluk and coffee estate owners are unhappy with the prices fixed under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act.

#### About Yettinahole project:

The Yettinahole project envisages to pump about 24 tmc ft of water from **Yettinahole, a tributary of River Netravathi**.

- It involves construction of dams and reservoir, pumping of water, flowing of water with gravitational force and finally filling of lakes.
- As per the project, 24 tmc ft of water from Yettinahole and a couple of other tributaries of Netravathi River will be drawn by constructing minor dams.
- The project envisages diverting the water to drought prone Chikkaballapur, Tumkur and Bangalore rural districts.
- The total cost of the project is Rs 8,323 crore.

### NASA's CHESS to study interstellar clouds

NASA is launching a sounding rocket **CHESS to study vast interstellar clouds and know about the earliest stages of star formation.**

#### Background:

Deep in space between distant stars, space is not empty. Instead, **there drifts vast clouds of neutral atoms and molecules, as well as charged plasma particles called the interstellar medium** — that may, over millions of years, evolve into new stars and even planets. These floating interstellar reservoirs are the focus of the NASA-funded CHESS sounding rocket mission, which will check out the earliest stages of star formation.

#### What you need to know about CHESS?

The Colorado High-resolution Echelle Stellar Spectrograph will measure light filtering through the interstellar medium, which provides crucial information for understanding the lifecycle of stars.

- CHESS will train its eye at Beta Scorpii — a hot, brightly shining star in the Scorpius constellation well-positioned for the instrument to probe the material between the star and our own solar system.
- This is the third flight for the CHESS payload in the past three years, and the most detailed survey yet.

**Places in News- Lisbon:** PM Modi recently paid a visit to Lisbon, Portugal.

**Location:** Lisbon is the capital and the largest city of Portugal. It is continental Europe's westernmost capital city and the only one along the Atlantic coast. Lisbon lies

in the western Iberian Peninsula on the Atlantic Ocean and the River Tagus.

### Metro rail tunnels under Hooghly set a record:

The Kolkata Metro Rail Corporation (KMRC) has completed the construction of India's first set of underwater transportation tunnels. The two tunnels, 16.1 metres apart, with a diameter of 5.5 metres each, link the two banks of the Hooghly river — Howrah Maidan and Sealdah on one side with Kolkata on the other. The tunnels are at a depth of 13 metres below the riverbed, and 30 metres from the land surface.

### ISRO-made system to alert users at unmanned level crossings

The Indian Space and Research Organisation (ISRO) has developed **a satellite-based chip systems** to alert road users at unmanned level crossings about approaching trains and also help in tracking train movement on a real-time basis.

#### How it operates?

Road users will be warned by hooters once a train approaches an unmanned level crossing as railways are installing ISRO-developed integrated circuit (IC) chips on locomotives of trains.

- About 500 metres before the level crossings, the hooter will be activated through the integrated circuit (IC) chip, warning road users as well as the train driver near the crossing.
- The hooter will be louder as the level crossing nears, and finally it will be silent after the train passes by.
- Besides alerting road users, the satellite-based system will also be used for tracking trains for disseminating information about their movement on real time basis. This will be of great help to passengers as currently train movements are tracked manually.
- The satellite-based system will also help railways in mapping the area and the technology will come in handy at the time of accidents when it can be used to ascertain the exact location of trains and topography.

### What necessitates this move?

Safety at unmanned level crossings is a cause of serious concern for railways and the public transporter is exploring various ways to address the issue. There are about 10,000 unmanned railway crossings in the country which account for around 40 per cent of accidents involving the railways.

### Way ahead:

On a pilot basis, **the Mumbai and Guwahati Rajdhani trains will be equipped** with this system. More trains will be equipped with such technology in a phase-wise manner, according to the plan.

### Scorpene to gain in endurance

The Navy is planning to instal Air Independent Propulsion (AIP) modules on all six Scorpene submarines to extend their endurance. This will be done when the submarines go for normal refit which is six years after their induction.

### What is Air-independent propulsion?

Air-independent propulsion (AIP) is any **technology which allows a non-nuclear submarine to operate without the need to access atmospheric oxygen (by surfacing or using a snorkel).**

- It can augment or replace the diesel-electric propulsion system of non-nuclear vessels.
- It is based on **the combustion of stored oxygen and ethanol to augment battery-powered propulsion.**

### Significance of AIP:

Notably, a submarine is about stealth. It is a weapons platform not visible to the naked eye. AIP significantly improves stealth because it enables a submarine to generate electricity for services and battery charging and propulsion while completely submerged.

- AIP systems also generate electricity, powering a submarine's to operate and also generate oxygen, lighting and amenities for crew.
- They enable conventional diesel-electric submarines to remain submerged for two to three weeks at a time.
- Another advantage is that the Non-nuclear submarines running on battery power or AIP can be virtually silent.

### FSSAI issues draft regulations for organic food products

Food regulator FSSAI has come out with a draft regulation for organic food products, seeking to ensure that these food items are actually organic. The draft has been prepared in view of rising demand for organic food products, being considered as healthy, in the country.

- **Organic foods will have to comply with the provisions under the National Programme for Organic Production (NPOP) administered by the government or the Participatory Guarantee System for India (PGS-India)** run by the Agriculture Ministry or any other standards notified by the food authority.

### Key provisions:

- The draft regulation mandates that labelling of organic foods should convey full and accurate information on the organic status of the product.
- Organic food products should also carry a certification mark or a quality assurance mark given by any of the notified certification bodies.
- The FSSAI's draft has exempted organic food marketed through direct sale by the original producer or producer organisation to the end consumer from verification compliance. However, this exemption does not apply to processed organic products.

### What are organic food products?

Organic food products are either **those grown under a system of agriculture without the use of chemical fertilisers and pesticides or made from organically produced raw materials.**

- The FSSAI has defined 'organic agriculture' as a system of farm design and management to create an eco system of agriculture production without the use of synthetic external inputs such as chemicals, fertilisers, pesticides and synthetic hormones or genetically modified organisms.
- Organic farm produce means the produce obtained from organic agriculture, while organic food means food products that have been produced in accordance with specified standards for organic production, as per the draft.

**Need for regulation of organic food products:**

Currently, a number of food products are being marketed as organic. However, consumers do not have any way to check the authenticity of organic food products due to lack of a regulatory framework. The draft regulation on organic food is aimed at overcoming this problem and ensuring that what is sold as organic food is really organic.

**About FSSAI:**

FSSAI was set up in August 2011 under the Food Safety and Standard Act, 2006.

- It has powers to lay down standards for food articles and to regulate their manufacturing, storage, distribution, sale and import.
- Some of its activities include licencing and surveillance of food and beverages outlets, enforcement of safety regulations across registered food vendors and ensuring safety of imported food items, their standards and labelling.

**Consensus on NCBC bill**

A parliamentary panel examining a bill, which seeks to accord constitutional status to the National Commission for Backward Classes, has reached a consensus, paving the way for its likely passage in Rajya Sabha in the monsoon session. With the passage of the bill, the NCBC, a statutory body under the Ministry of Social Justice and Empowerment, will get a constitutional status.

**Background:**

The bill was referred to the Rajya Sabha's select committee after the opposition prevailed on the government to do so. It was passed by the Lok Sabha in April this year, but the opposition blocked its consideration in the upper house.

**The bill proposes:**

- Insertion of a new Clause (26C) under Article 366 to define Socially and Educationally Backward Classes.
- Insertion of provision after Articles 341 and 342 viz. 342 A to provide for Parliament's approval for every inclusion into and exclusion from the Central List of Other Backward Classes.

- Repeal of National Commission for Backward Classes Act, 1993, and Rules framed there under.
- Dissolution of the Commission constituted under the Act of 1993.
- Composition of the new Commission, i.e. National Commission for Socially and Educationally Backward Classes, with a Chairperson, Vice Chairperson and three other Members.

**Background:**

Set up in 1993, the NCBC was entrusted with examining requests for inclusion of any class of citizens as a backward class in the lists and hear complaints of over-inclusion or under-inclusion of any backward class in such lists and advice central government on the matter.

**CVC can now probe corruption cases in private sector banks**

The Central Vigilance Commission (CVC) can now probe allegations of corruption in private sector banks and against their employees. The Reserve Bank of India (RBI) has given the necessary approval to the CVC on this.

**Background:**

The move comes after the Supreme Court last year ruled that the chairman, managing directors and other officers of a private bank could be seen as public servants when it came to the Prevention of Corruption (PC) Act, 1988.

- The apex court had said all officials working in banks operating under an RBI licence would be defined as public servants under the PC Act. It had said bank employees, private or public, were on public duty and therefore came under the law.
- The Supreme Court had also referred to Section 46A of the Banking Regulation Act and said that such bank officials were considered public officials.

**Basic facts: Central Vigilance Commission:**

- It was created via executive resolution (based on the recommendations of Santhanam committee) in 1964 but was conferred with statutory status in 2003. It is the apex vigilance institution.

- Presently, the body consists of central vigilance commissioner along with 2 vigilance commissioners.
- They are appointed by the President of India on the recommendations of a committee consisting of Prime Minister, Union Home Minister and Leader of the Opposition in Lok Sabha (if there is no LoP then the leader of the single largest Opposition party in the Lok Sabha).
- Their term is 4 years or 65 years, whichever is earlier.
- It submits its report to the President of India.
- The Central Vigilance Commissioner or any Vigilance Commissioner can be removed from his office only by order of the President on the ground of proved misbehavior or incapacity after the Supreme Court, on a reference made to it by the President, has, on inquiry, reported that the Central Vigilance Commissioner or any Vigilance Commissioner, as the case may be, ought to be removed.
- CVC is advisory body.

#### **K Kasturirangan, to head drafting committee of National Education Policy:**

The ministry of human resource development has set up a new committee to make the final draft on the National Education Policy (NEP) on Monday. The nine-member panel is to be chaired by former ISRO chief K Kasturirangan.

#### **‘DeployBot’:**

In an effort that will aid space agencies in their endeavour, scientists from South Korea have built the first foldable walking robot that pops up when deployed, and could be used for future space missions as well as seabed exploration on Earth.

- Named ‘DeployBot’, the robot is assembled from eight modules: four for the body and one for each of the four legs. In their folded state, the modules lie flat, and after they are deployed they pop up into roughly a square shape.
- The main advantage of this modular robot is robustness in various environments due to lack of mechanical systems such as motors and gears. Thus, problems facing motor-based robots, such as sealing and lubrication of

mechanical systems in water or space environments, are not a problem for the smart actuator.

#### **Kaushik Basu leads International Economic Association**

The Finance Ministry’s former Chief Economic Advisor Kaushik Basu has taken over as President of **the International Economic Association (IEA)**. He will hold the office for a term of three years.

#### **What you need to know about IEA?**

The IEA was founded in 1950 as a **Non-Governmental Organization**, at the instigation of the Social Sciences Department of UNESCO. It has since its creation maintained information and consultative relations with UNESCO and is since 1973 a federated member of the International Social Science Council.

- Its aim from the beginning has been to promote personal contacts and mutual understanding among economists in different parts of the world through the organization of scientific meetings, through common research programs and by means of publications of an international character on problems of current importance.
- The IEA is governed by a **Council, composed of representatives of all Member Associations as well as a limited number of co-opted members**. The Council meets triennially when it reviews the general policy of the Association and elects the President and other Officers and members of the Executive Committee for a three-year term of office.

#### **US to Declare China as Among World’s Worst Human Trafficking Offenders**

The United States is set to declare **China as among the world’s worst offenders in human trafficking and forced labor**, placing it alongside countries the U.S. has long disparaged — Iran, North Korea and Syria. China has been listed as a Tier 3 human trafficking and forced labor offender, the lowest ranking. In 2016, China was placed in Tier 2 “watch list” deserving special scrutiny in the last year.

### Why the downgrade?

According to the US, Beijing was not doing enough to curb “state sponsored forced labor,” and did not meet “minimum standards” for fighting human trafficking, even though it was making progress.

- Concerns have also been raised about forced begging in China that particularly affects children. Girls and women from rural areas are at higher risk of being recruited for sex trafficking in cities.

### Implications of this move:

Countries placed in Tier 3 can be penalized with sanctions, including the withholding of non-humanitarian aid and assistance that could affect agreements with the International Monetary Fund and World Bank. Officials from countries designated in that tier can be barred from participating in US government educational and cultural exchange programs.

### Uranus’ Unusual Rotation Creates Light Switch Effect

NASA’s **Voyager 2 spacecraft** has discovered that Uranus’ magnetosphere – the region defined by the icy planet’s magnetic field and the material trapped inside it – gets flipped on and off like a light switch every day as it rotates along with the planet.

### What causes light switch effect?

The finding showed that magnetosphere is ‘open’ in one orientation, allowing solar wind to flow into it. It is later “closed”, forming a shield against the solar wind and deflecting it away from the planet. When the magnetised solar wind meets this tumbling field in the right way, it can reconnect and Uranus’ magnetosphere goes from open to closed to open on a daily basis.

Therefore, scientists say Uranus’ rapid rotational change in field strength and orientation lead to a periodic open-close-open-close scenario as it tumbles through the solar wind.

### Is it a unique phenomenon?

Reconnection of magnetic fields is a phenomenon throughout the solar system. It is one reason for the Earth’s auroras. Since the same alignment of the Earth’s magnetosphere is always facing toward the sun, the

magnetic field threaded in the solar wind must change direction in order to reconfigure the Earth’s field from closed to open.

### Water exists as two different liquids

Scientists at Stockholm University have discovered **two phases of water with large differences in structure and density**. The results are based on experimental studies using X-rays.

### What you need to know?

In this study, the researchers investigated whether liquid water can have low- and high-density forms. The new results give very strong support to a picture where water at room temperature can’t decide in which of the two forms it should be, high or low density, which results in local fluctuations between the two.

### Significance of this discovery:

These new results not only create an overall understanding of water at different temperatures and pressures, but also how water is affected by salts and biomolecules important for life. The researchers believe that the increased understanding of water can lead to new insights on how to purify and desalinate water in the future.

### Jaitley holds meeting on bitcoins

Finance Minister Arun Jaitley recently held an inter-ministerial meeting to examine risks related to virtual currencies (VCs) like bitcoins. Although several issues concerning bitcoins were discussed, no decision was taken.

### Background:

Bitcoins were in news recently after a massive global ransomware attack WannaCry hit systems in over 100 countries. The cyber criminals demanded a fee of about USD 300 in crypto-currencies like bitcoin for unlocking affected devices.

- The government has been debating over issues concerning bitcoins and had last month sought public opinion on allowing virtual currencies. The circulation of VCs has been a cause of concern among central bankers the world over for quite a while now. Reserve Bank of India had also cautioned the users, holders and traders of VCs, including bitcoins.

- An Inter- Disciplinary Committee has also been constituted to take stock of the present status of VCs both in India and globally and suggest measures for dealing with such currencies.

#### What is a Bitcoin?

Bitcoin is a virtual currency that can be used to move money around the world quickly and with relative anonymity, without the need for a central authority, such as a bank or government.

#### Netherlands backs UNSC, NSG bids

The Netherlands has backed India's early entry into the NSG and other multilateral export control regimes, and supported the country's bid for a permanent UN Security Council seat. The Netherlands' support came after Prime Minister Narendra Modi held talks with his Dutch counterpart, Mark Rutte.

- The Netherlands also expressed its support for India's membership to Wassenaar Arrangement and the Australia Group.

#### What is NSG?

Nuclear Suppliers Group (NSG) is a multinational body concerned with reducing nuclear proliferation by controlling the export and re-transfer of materials that may be applicable to nuclear weapon development and by improving safeguards and protection on existing materials. Interestingly, the NSG was set up in 1974 as a reaction to India's nuclear tests to stop what it called the misuse of nuclear material meant for peaceful purposes. Currently, it has 48 members.

#### Background:

India sought membership of the NSG in 2008, but its application hasn't been decided on, primarily because signing the NPT or other nuclear moratoriums on testing is a pre-requisite. However, India has received a special waiver to conduct nuclear trade with all nuclear exporters.

- **India, Pakistan, Israel and South Sudan are among the four UN member states which have not signed the NPT**, the international pact aimed at preventing the spread of nuclear weapons.

#### Places in News- Nathu La:

- China has accused Indian troops of "crossing the boundary" in the Sikkim sector and put their immediate withdrawal as condition to reopen the Nathu La Pass for Indian pilgrims travelling to Kailash Mansarovar.
- Nathu La is a mountain pass in the Himalayas. **It connects the Indian state of Sikkim with China's Tibet Autonomous Region.**
- It is also **one of the four officially agreed BPM (Border Personnel Meeting) points** between the Indian Army and People's Liberation Army of China for regular consultations and interactions between the two armies, which helps in defusing stand-offs.
- The four BPM are: Chushul in Ladakh, Nathu La in Sikkim, Bum La Pass in Tawang district of Arunachal Pradesh, and Lipulekh Pass in Uttarakhand.

#### GeneXpert:

- It is a device released recently by the WHO which can be used to diagnose TB and HIV infections, and quantitatively measure HIV and hepatitis C viral loads.
- The WHO is recommending use of these state-of-the-art portable machines the size of a microwave oven, which can run molecular tests.

#### CBDT entered into Five Unilateral Advance Pricing Agreement

The Central Board of Direct Taxes (CBDT) has entered into Five Unilateral Advance Pricing Agreement with Indian taxpayers. A Bilateral Advance Pricing Agreement involving United Kingdom has also been signed.

- The APAs signed pertain to healthcare, information technology and gaming/animation (media) sectors of the economy.

#### Know about APAs:

The APA Scheme endeavours to provide **certainty to taxpayers** in the domain of **transfer pricing** by specifying the methods of pricing and determining **the arm's length price** of international transactions in advance for the maximum of five future years.

Further, the taxpayer has **the option to rollback the APA for four preceding years**, as a result of which, tax certainty for a total period of nine years is provided. Since its inception, the APA scheme has attracted tremendous interest among Multi National Enterprises (MNEs). An APA can be unilateral, bilateral, or multilateral.

#### **An APA provides the following Benefits:**

- Certainty with respect to tax outcome of the tax payer's international transactions, by agreeing in advance the arm's length pricing or pricing methodology (ies) to be applied to the tax payer's international transactions covered by the APA.
- Removal of an audit threat (minimize rigours of audit), and deliverance of a particular tax outcome based on the terms of the agreement.
- Substantial reduction of compliance costs over the term of the APA.
- For tax authorities, an APA reduces cost of administration and also frees scarce resources.

#### **Swasth Saarthi Abhiyaan (SSA)**

#### **Swasth Saarthi Abhiyaan (SSA) was recently inaugurated.**

What you need to know about Swasth Saarthi Abhiyaan (SSA)?

The SSA event is a unique initiative to address the major issues being faced by public transport drivers, with almost all of them being users of CNG.

- It is a two month long mega campaign focusing on providing preventive healthcare to the auto, taxi and bus drivers of the region. It will provide free health checkup which includes blood test, sugar test, eye test.
- SSA is an initiative of Indraprastha Gas Limited (IGL).

#### **APEDA refutes rumours about plastic rice**

Agricultural and Processed Foods Export Development Agency (APEDA) has refuted rumours about plastic rice, attributing the videos on social media showing bouncing rice balls to a natural property of rice.

#### **Why do they bounce then?**

According to APEDA, **the buoyancy of rice balls dropping on a hard surface is its natural property and it depends on the amylose content.** Rice starch consists of two main components — amylose and amylopectine — generally in a proportion of 25:75. However, there exists a lot of variation in germ plasm with respect to proportion of amylose and amylopectine. If, amylose is low (<10%), the rice on cooking tends to become very sticky and the rice balls made of such cooked rice will have no buoyancy on dropping to a surface. However, the rice balls made up of cooked rice from intermediate to high amylose (22-30%) type rice, will have buoyancy and these balls will jump for three-four times when dropped on hard surface.

#### **What you need to know about APEDA?**

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

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

- Fruits, Vegetables and their Products.
- Meat and Meat Products.
- Poultry and Poultry Products.
- Dairy Products.
- Confectionery, Biscuits and Bakery Products.
- Honey, Jaggery and Sugar Products.
- Cocoa and its products, chocolates of all kinds.
- Alcoholic and Non-Alcoholic Beverages.
- Cereal and Cereal Products.
- Groundnuts, Peanuts and Walnuts.
- Pickles, Papads and Chutneys.
- Guar Gum.

- Floriculture and Floriculture Products.
- Herbal and Medicinal Plants.

#### **Administrative set up:**

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

#### **GSAT 17**

With French rocket **Ariane-5** successfully launching the 3,477-kg satellite from French Guiana, India has added GSAT-17 to its existing fleet of 17 communication satellites. Besides GSAT-17, Ariane-5 also put into space Hellas Sat 3-Inmarsat S EAN, a “condosat” for Inmarsat and Hellas zSat.

#### **Key facts:**

- The satellite has been inducted into the Indian National Satellite (INSAT)/GSAT system. It carried payloads in the normal C, extended C and S bands, providing various communication services.
- It was launched into a Geosynchronous Transfer Orbit (GTO).
- GSAT-17 also has equipment for meteorological data relay and satellite-based search and rescue services being provided by earlier INSAT satellites.
- ISRO Master Control Facility (MCF) at Hassan in Karnataka has taken control and will perform the initial orbit raising maneuvers later. GSAT-17 has a life expectancy of 15 years.

#### **In the lines of INTERPOL, Northeastern states to have NEPOL**

##### **What is NEPOL?**

It is a proposed police organization by the North eastern states including West Bengal in the lines of International Police Organization (INTERPOL). It will facilitate cooperation between the states of the region in tackling insurgency, cross border crime and smuggling.

#### **Need for NEPOL:**

North eastern militants have come together and formed United Liberation Front of Western South East Asia (UNLFW), an umbrella organization comprising of the United Liberation Front of Assam (Independent), Nationalist Socialist Council of Nagaland (Khaplang), Kamatapur Liberation Organization (KLO) and National Democratic Front of Bodoland (Songbijit). This organisation has orchestrated several strikes on security forces.

- Also, North eastern states share over 4500km long border with Bangladesh, China, Myanmar and Bhutan. India and Bangladesh share a 4,096-km-long border, of which 262 km falls in Assam.
- Hence, cooperation among the police forces between the states is necessary.

#### **Niti Aayog moots new regulator for coal, gas**

Niti Aayog has suggested creation of regulators for coal as well as oil and gas.

#### **Need for regulators:**

Coal and upstream petroleum sectors have lacked independent, statutory regulators. Due to several reasons, including strong presence of PSUs and limited number of private operators, it was so far not found useful to place the latter in position. But, now with increased private activity, the time is appropriate.

#### **Why not have a single regulator for energy sources?**

Indian energy market is not uniformly developed. And due to the large inherent complexities present in different fuel sources, it is pertinent that there ought to be sectoral regulators.

#### **Govt. unveils new hydrocarbon policy**

In what could mark a paradigm shift in the country's hydrocarbon exploration policy, the government has launched the National Data Repository (NDR) along with the Open Acreage Licensing Policy (OALP).

**Know about Open Acreage Licensing Policy (OALP):**

The OALP, a part of the government's Hydrocarbon Exploration and Licensing Policy (HELP), gives exploration companies the option to select the exploration blocks on their own, without having to wait for the formal bid round from the Government. The company then submits an application to the government, which puts that block up for bid. The new policy will open up 2.8 million square kilometres of sedimentary basins for exploration and eventual production.

**About HELP:**

The Hydrocarbon Exploration & Licensing Policy (HELP) opens up India's entire sedimentary basin for investment from domestic and foreign players under a simplified, transparent and investor-friendly fiscal and administrative regime.

- The new policy aims to provide Investors a ready access to huge amount of seismic data available in National Data Repository (NDR), flexibility to carve out exploration acreages through an open acreage licensing process and increased operational autonomy through a new revenue sharing model.
- The National Data Repository (NDR) manifested through an open acreage licensing (OAL) process will be a key facilitator by providing seamless access to India's entire E&P data process through a digital medium to all investors with the objective of harnessing the potential of India's large basinal area.

**The key features of HELP are:**

- Single, uniform license for extraction and exploration for all types of hydrocarbon prospects.
- Open acreage licensing (OAL) which will permit investors to carve out interested blocks and submit Expression of Interest (EoI), which will be subsequently given through bi-annual bid rounds.
- Simple and easy to administer Revenue Sharing Model.
- Full marketing freedom and free pricing for crude oil and natural gas.
- Exploration allowed during entire contract period.

- Zero royalty rates for deep water & ultra-deep water blocks for first 7 years.
- Equal weightage to work program and fiscal share.
- No oil cess.
- Custom duty exemption.

**NIFT Chairperson:**

The Union Government has appointed Shri Rajesh V. Shah as Chairperson on the Board of Governors of the National Institute of Fashion Technology as per the provisions of the National Institute of Fashion Technology Act, 2006.

What you need to know about NIFT?

- National Institute of Fashion Technology (NIFT) is a fashion institute in India. It was set up in 1986 under the aegis of the Ministry of Textiles, Government of India.
- NIFT was granted statutory status in 2006, empowering it to award degrees and other academic distinctions.

**QueSST:**

NASA has completed the preliminary design review of its Quiet Supersonic Transport or QueSST aircraft design. QueSST is the initial design stage of the agency's planned Low Boom Flight Demonstration (LBFD) experimental airplane, otherwise known as an X-plane.

**New training programme 'COMMIT' for State Government officials**

A new training programme Comprehensive Online Modified Modules on Induction Training (COMMIT) for State Government officials has been launched. The objective of this **training programme is to improve the public service delivery mechanism and provide citizen centric administration through capacity building of officials who interact with the citizens on day-to-day basis**

**What you need to know about COMMIT?**

The COMMIT programme, developed by DoPT **in collaboration with United Nations Development Programme (UNDP)**, will supplement the existing 12-Day ITP launched in 2014-15 for newly recruited state Government officials to develop in them Generic & Domain specific competencies.

(61)

- The programme will cover approximately 74,000 State Government officials in the financial year 2017-18.
- It will be of 28 hours duration which will include e-Modules for 20 hours and face-to-face training for 8 hours. The 20 hours e-training would be imparted through specifically developed 12 Generic and 3 Domain specific e-Modules.
- The modules on soft skills will be delivered as e-Modules & through face-to-face training and the domain modules will be covered through e-Modules only. The programme will be implemented through State Administrative Training Institutes (ATIs).
- COMMIT will be launched in 6 States of Assam, Haryana, Maharashtra, Tamil Nadu, Telangana and West Bengal initially on pilot basis during the current financial year 2017-18 and within next year it is expected to cover all India level.

#### **Launch of Web Application for Legal Services to Prisoners**

National Legal Services Authority (NALSA) has launched a Web Application for free Legal Services to Prisoners and the Legal Services Management System developed through the NIC.

#### **Key facts:**

- Through Web Application the State Legal Services Authorities and District Legal Services Authorities shall feed the data for each individual prison inmate in the jails within their jurisdiction, with regard to their being represented through a counsel in the court.
- The software will be able to generate reports showing total number of inmates, number of inmates unrepresented, number of inmates represented by legal services lawyers and number of inmates represented by private lawyers.
- All the above information can be generated State wise, District wise and also in respect of each jail. The reports can also be generated by the period of incarceration, which will in turn generate information with regard to prisoners eligible for bail under Section 436-A Cr.P.C.

#### **Significance of this move:**

The application shall make the legal services system more transparent; this application will be universally useful for all the relevant authorities to monitor the grant of legal aid to the prisoners in order to ensure that absolutely no prisoner goes unrepresented right from the first day of his production in the court.

#### **About NALSA:**

NALSA has been constituted under the Legal Services Authorities Act, 1987, to provide free legal services to weaker sections of society. The aim is to ensure that opportunities for securing justice are not denied to any citizen by reasons of economic or other disabilities.

#### **Important functions performed by NALSA:**

- NALSA organises Lok Adalats for amicable settlement of disputes.
- NALSA identifies specific categories of the marginalised and excluded groups and formulates various schemes for the implementation of preventive and strategic legal service programmes.
- Services provided by the agency include free legal aid in civil and criminal matters for the poor and marginalised people who cannot afford the services of a lawyer in any court or tribunal.
- Free legal services include provision of aid and advice to beneficiaries to access the benefits under the welfare statutes and schemes and to ensure access to justice in any other manner.

#### **PM inaugurates filling of Aji Dam under Sauni Yojana**

The Prime Minister inaugurated the filling of Aji Dam near Rajkot under Sauni Yojana. The Narmada water reaching the dam will resolve the water woes of the people of this city in Saurashtra region which has been facing perennial water shortage due to deficient rains.

#### **What is the SAUNI Yojana?**

The project is not a part of the Narmada project but is based on it. 1 MAFT (million acre feet) flood water has been allotted to Saurashtra by the state government and this water will be pumped to major reservoirs in the region

under the SAUNI Yojna. Unlike traditional irrigation projects, SAUNI is technically a 'linking' project, where the water will be filled in irrigation dams that are already equipped with canal network. This network of canals will then help channel water into farms.

- Also, SAUNI project involves making pipe canals instead of the conventional open canals. The pipelines in the SAUNI project are underground, which means that no land needs to be acquired.

### Centenary year celebrations of Sabarmati Ashram

Centenary year celebrations of Sabarmati Ashram have begun. PM Modi visit the ashram in Gujarat to take part in the celebrations.Z

### Sabarmati Ashram:

Sabarmati Ashram (also known as Gandhi Ashram, Harijan Ashram, or Satyagraha Ashram) is located in the Sabarmati suburb of Ahmedabad, Gujarat, on the banks of the River Sabarmati.

- It was from his base here that Gandhi led the Dandi march also known as the Salt Satyagraha on 12 March 1930. Before starting the march to Dandi, Gandhiji declared that he will not return to the ashram before the independence of the country.
- The Ashram was started in all earnest with a two-fold purpose- one was to carry on the search for Truth, and the other was to create a non-violent group of workers, who would create a non-violent group of workers, who would organize and help to secure freedom for the country.

### Home Ministry to give security nod for GSTN

The Goods and Service Tax Network (GSTN), the IT backbone of the Goods and Service Tax (GST) is all set to get a security clearance from the Home Ministry, hours before the indirect tax regime comes into effect on July 1.

### Background:

Though the GSTN has been operational, it had not got the security clearance — a mandatory requirement as it has private participation.

### What you need to know about GSTN?

GSTN is a private, not-for profit company in which the central government and states and Union territories together hold 49%. The rest is owned by financial institutions.

- The company will provide information technology support to all stakeholders for smooth implementation of the new taxation regime across the country and will be the repository of all information related to taxation and entities registered under GST.
- GSTN will mobilize working capital by levying a user fee on state governments for its services.

### Army, PLA in a tug of war over Doklam Plateau

At the heart of the border dispute between India and China is a road being built by China in Doklam, where it has a territorial dispute with Bhutan. Beijing has accused India of having a "hidden agenda" hinting that New Delhi is trying to stop it from building the road on Bhutan's behalf. Bhutan has lodged a formal protest asking China to stop work on the road.

### What you need to know about the Doklam dispute?

Doklam, also called Donglang, is under Chinese control, but is also claimed by Bhutan. It is **located at a tri-junction of India, Tibet and Bhutan and is close to the Nathu La pass**, through which China has blocked this year's Kailash Mansoravar yatra or pilgrimage over the border tension with India.

- Doklam is disputed territory and Bhutan has a written agreement with China that pending the final resolution of the boundary issue, peace and tranquility should be maintained in the area.
- The disputed area also provides, according to India perspective, a bigger buffer to its sensitive Chicken's Neck, or the Siliguri Corridor, which is an extremely narrow stretch of land that connects the north-eastern region to the rest of India. From the Chumbi Valley it is just a little over 100 kilometres away.