My Notes....

NATIONAL

Privacy is a fundamental right

    A nine-judge Constitution Bench of the Supreme Court on 24 August 2017 ruled that the **Right to Privacy of a citizen is protected by the Constitution** and it is a fundamental right. The apex court ruled that **this** right is part of the right to life and liberty **guaranteed by Article 21**and belongs to the freedom guaranteed in the fundamental rights chapter of the Constitution. The verdict in the words of the court is "**the right to privacy is protected as an intrinsic part of the right to life** and personal liberty under Article 21 and as a **part of the freedoms guaranteed by Part III of the Constitution**.

What

1. The **court ruled that privacy is not an absolute right**. A law which encroaches upon privacy will have to withstand the touchstone of permissible restrictions on fundamental rights.
2. **In the context of Article 21**, an invasion of privacy must be justified on the basis of a law which stipulates a procedure which is fair, just and reasonable.
3. **The issue of the right to privacy** was decided by the larger Bench because, in a batch of writ petitions challenging **the Aadhaar identity cards**, the government argued that right to privacy was not guaranteed by the Constitution.
4. Two judgments were quoted stating that right to privacy was not expressly found in the fundamental rights chapter of the Constitution. Therefore, the court had to decide first whether the citizens have the right to privacy at all and to what extent.
5. **There are other hotly-contested cases like whether WhatsApp, Facebook**, and other messaging services violate the right to privacy of users by collecting personal information and selling them to private parties.
6. **The present Bench overruled two Constitution Bench judgments of the 1950s and 1960s**, which had held that the Constitution did not guarantee the right to privacy as a fundamental right.

What is right to privacy?

1. The Oxford dictionary defines **privacy as "a state in which one is not observed or disturbed by other people"** or "the state of being free from public attention". So, privacy can also be defined as **the ability of an individual to be left alone and express them selectively**.
2. The IAPP defines information privacy as "**the right to have some control over how your personal information is collected and used**".
3. Right to privacy refers to a legal framework that provides individuals a legal right to protect their or their data's privacy.

Privacy in globally

1. **Article 12 of the Universal Declaration of Human Rights, 1948**, and **Article 17 of the International Covenant on Civil and Political Rights (ICCPR), 1966**, legally protects persons against "arbitrary interference" with their privacy, family, home, correspondence, honour and reputation. **India became a signatory to this on April 10, 1979**.
2. The European Union also recognises the respect for private and family life, home and communications. In Europe, this is covered by the Data Protection Directive, which defines how information can be processed and used.
3. Just like the Indian constitution, **the US constitution also does not contain an expressly stated right to privacy**. But the US Supreme Court has interpreted several amendments to argue that such a right does exist.

Bench's conclusions

1. Privacy is the constitutional core of human dignity
2. Privacy includes at its **core the preservation of personal intimacies**, the sanctity of family life, marriage, procreation, the home and sexual orientation
3. **Privacy also connotes a right to be left alone**

4. This Court has not embarked upon an exhaustive enumeration or a **catalogue of entitlements or interests comprised in the right to privacy**
5. **Life and personal liberty are inalienable rights**
6. These are rights which are inseparable from a dignified human existence; the dignity of the individual, equality between human beings and the quest for liberty are the foundational pillars of the Constitution
7. **Life and personal liberty are not creations of the Constitution**; these rights are recognised by the Constitution as inhering in each individual as an intrinsic and inseparable part of the human element which dwells within.

How did this case come?
1. Challenging the **implementation of the Aadhaar scheme by the Union government**, various petitioners had argued before the Supreme Court that it was an invasion of an **individual's privacy as biometric data were collected**.
2. The government argued that privacy was not a fundamental right and it became necessary for the Supreme Court to decide whether privacy was a fundamental right or not. Hence, a separate bench had to be formed.

CSIR ranked 9th in the world

India's largest autonomous public research and development organisation **Council of Scientific and Industrial Research (CSIR) has been ranked ninth in the world**. The ranking is **based on a composite indicator** that combines **research performance, innovation outputs and societal impact measured by their web visibility**, so as to reflect scientific, economic and social characteristics of institutions.

What
1. The institute has been ranked ninth amongst a total of 1,207 government institutions, according to the **Scimago Institutions ranking World Report 2017**.
2. With this ranking, **CSIR comes in the company of globally renowned organisations** namely Chinese Academy of Sciences; Centre National de la Recherche Scientifique, France; Helmholtz Gemeinschaft and Max Planck Gesellschaft in Germany; Consejo Superior de Investigaciones Cientificas, Spain; Russian Academy of Sciences; Japan Science and Technology Agency; Consiglio Nazionale delle Ricerche, Italy and Leibniz Gemeinschaft, Germany.
3. In overall global ranking**, CSIR stands at 75th position** amongst 5250 institutions world-wide.
4. **It is the only Indian organisation** which has found place amongst the Top 100 Global Institutions.

Flashback
1. **Scimago Institutions Ranking (SIR)** is a science evaluation resource developed by **Scimago Labs based on data from Scopus** -- one of the world's largest databases of peer-reviewed research literature, to assess Worldwide Institutions.
2. **The CSIR has a dynamic network of 38 national laboratories** and 38 outreach centres. CSIR covers a wide spectrum of science and technology -- from radio and space physics, oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology.
3. It provides significant technological intervention in many areas with regard to societal efforts which include environment, health, drinking water, food, housing, energy, leather, farm and non-farm sectors.

IRNSS-1H mission unsuccessful

Indian Space Research Organsiation's (Isro) attempt to launch **India's eighth navigation satellite IRNSS-1H failed** on 31 August 2017. While the rocket took off successfully, the **heat shield did not separate** as planned due to which satellite could not be put in orbit. **This is the first** failure in 35 launches for Isro's workhorse Polar Satellite Launch Vehicle PSLV. Since heat shield did not open on PSLV-C39, satellite got trapped, thus making the launch unsuccessful.

What

1. **Polar Satellite Launch Vehicle (PSLV-C39)** carrying the **1425-kg navigation satellite IRNSS-1H** blasted off from the second launch pad at Sriharikota in Andhra Pradesh.
2. Till around 20 minutes the flight was performing normal, but when it came to the stage of heat shield separation the launch turned unsuccessful.
3. **Since 2013, Isro has launched seven navigation satellites**. The **last one was launched on April 28, 2016**. Each satellite has a **life span of 10 years**.
4. The satellite, which was launched today, **supposes to replace IRNSS-1A as its rubidium atomic clocks have failed**. It may be noted, the clocks are important to provide the accurate positional data.
5. The Rs 1,420 crore Indian satellite navigation system **NavIC consists of nine satellites -- seven in orbit and two as substitutes**. **One of the substitutes is the IRNSS-1H**.
6. Like its other IRNSS predecessors, IRNSS-1H was supposed to carry **two types of payloads – navigation payload and ranging payload**. The payload will transmit navigation service signals to the users and they will be operating in L5-band and S-band.
7. The ranging payload of IRNSS-1H consists of a C-band transponder, which facilitates accurate determination of the range of the satellite. IRNSS-1H also carries Corner Cube Retro Reflectors for laser ranging.
8. According to Isro, **NavIC is useful for fishermen to reach the potential fishing area**. The fishermen can also get alert messages relating to bad weather, high waves or when they approach international maritime boundary line.
9. **IRNSS-1H has been developed by Indian Space Research Organisation (ISRO) jointly with the private sector**. **The first of its kind initiative was part of ISRO's plans** to enable the industry to take part in the country's space revolution, which would also help the organisation to speed up the launches.
10. A consortium led by **Bengaluru-based Alpha Design Technologies successfully completed 25 per cent of the development work of IRNSS-1H**, under the guidance of ISRO scientists. Earlier, the private sector's role was only limited to supplying components to ISRO.

MUSK approved

The Union Cabinet chaired by the Prime Minister has accorded its approval **for creation of a non-lapsable pool in the Public Account** for secondary and higher, education known as **"Madhyamik and Uchchtar Shiksha Kosh" (MUSK)** into which all proceeds of "**Secondary and Higher Education Cess**" will be credited. The funds arising from the MUSK would be utilized for schemes in the education sector which would be available for the benefit of students of secondary and higher

Background

1. **During the 10th Plan, an education cess of 2% on all central taxes was imposed** w.e.f. 1.4.2004 to make available additional resources for basic education/elementary education to augment the existing budgetary resources.
2. **A cess @ 1% on central taxes, called the "Secondary and Higher Education Cess"** was levied through Finance Act, 2007 to "fulfil the commitment of the Government to provide and finance secondary and higher education" (Section 136 of the Act).
3. In July, 2010, a draft cabinet note was circulated by the HRD Ministry wherein it was proposed to create a non-lapsable fund in the Public Account called "Madhyamik and Uchchatar Shiksha Kosh" (MUSK) as a receptacle for the proceeds of the Secondary and Higher Education Cess.
4. Subsequently, the HRD Ministry sought the approval of the Department of Economic Affairs for revisiting the issue of creation of "**Madhyamik and Uchchatar Shiksha Kosh" (MUSK) on 11th February, 2016**.
5. Department of Economic Affairs on 20th June, 2016 approved that this Ministry may move a draft Cabinet Note to seek the approval of the Cabinet for creation of. MUSK.

education, all over the country. In connection with the above fund, the **Union Cabinet also accorded its approval to the following:**

1. **Administration and maintenance of the above pool** by Ministry of Human Resource Development.
2. **Accruals from the Cess would be utilized** in the ongoing schemes of Secondary and Higher Education. However, the Ministry of Human Resources Development can allocate funds for any future programme/scheme of secondary and higher education, based on the requirement, as per prescribed procedure.
3. In any financial year, the expenditure on ongoing schemes of the Department of School Education & Literacy and Department of Higher Education would be initially incurred from the gross budgetary support (GBS) and the expenditure would be financed from the MUSK only after the GBS is exhausted.
4. **The MUSK would be maintained as a Reserve Fund in the non-interest bearing section of the Public Accounts of India**.
5. **The fund would be operationalised as per the present arrangements under Prarambhik Shiksha Kosh (PSK)** wherein the proceeds of cess are used for Sarv Shiksha Abhiyan (SSA) and Mid-Day Meal (MDM) Schemes of the Department of School Education & Literacy.

Navika Sagar Parikrama

Navika Sagar Parikrama is a project wherein a team of women officers of the Indian Navy would circumnavigate the globe on an Indian-built sail boat **INSV Tarini**. This is the **first ever Indian circumnavigation** of the globe by an **all-women crew**. The project was commenced on Sep 17, 2017. **INSV Tarini is the sister vessel of INSV Mhadei**. The project is considered essential towards promoting Ocean Sailing activities in the Navy while depicting **Government of India's thrust for 'Nari Shakti'**. The first Indian Solo circumnavigation was undertaken by Capt Dilip Donde, SC (Retd) from 19 Aug 09 to 19 May 10 onboard the **Indian built vessel, INSV Mhadei**. The first Indian non-stop solo circumnavigation was undertaken by Cdr Abhilash Tomy, KC from 01 Nov 12 to 31 Mar 13. INSV Tarini, a 55 foot sailing vessel has been **built by M/s Aquarius Shipyard Pvt Ltd, Goa**. Tarini was inducted into the Indian Navy on 18 Feb 17. The expedition has been aptly **titled 'Navika Sagar Parikrama'**, aimed at promoting women empowerment in the country and ocean sailing by the Indian Navy. The expedition would inspire the youth of our nation to develop an understanding of the sea and instill a spirit of adventure and camaraderie.

Aims

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

'Creamy layer' income enhanced

The Union Cabinet has approved a proposal to set up a panel **to examine sub-categorisation of the socially and Educationally Other Backward Castes (OBCs)**. The stratification of the OBC quota could lead to a **quota within quota in OBC reservations**, in a move that may have far reaching impact in national politics. This could affect **educationally and socially advanced communities within the backward**

classes like Yadavas who have benefited from the policy of positive discrimination brought by the Mandal Commission recommendation over the past three decades.

What

1. The Cabinet also gave nod to enhance the annual income ceiling for the **OBC creamy** layer category from the **current Rs 6 lakh to Rs 8 lakh**.

2. This would increase the existing number of beneficiaries of various Government programmes and schemes including 27% quota in education and employment under the non-creamy layer OBC category.

3. The **proposed Commission will examine the extent of "inequitable distribution" of benefits of reservation** among the castes and communities included in the broad category of the OBCs, with reference to the OBCs included in the Central list.

4. It will work out the mechanism, criteria, norms and parameters, in a scientific approach, for sub-categorization within such OBCs, and take up the exercise of identifying the respective castes/communities/ sub-castes/ synonyms in the Central List of the OBCs and classify them into their respective sub-categories.

5. **The Commission will submit its report within 12 weeks from the date of appointment** of the Chairperson of the Commission.

6. Andhra Pradesh, Telangana, Puducherry, Karnataka, Haryana, Jharkhand, West Bengal, Bihar, Maharashtra and Tamil Nadu have already carried out sub-categorization of the OBCs.

7. This comes months after the Cabinet approved a proposal for setting up of a new commission for backward classes as a constitutional body. The National Commission for Socially and Educationally Backward Classes (NCSBC) Bill is currently pending for Parliament's clearance.

Pradhan Mantri Kisan Sampada Yojana

The Cabinet Committee on Economic Affairs, chaired by the Prime Minister, has approved the **renaming of** the new Central Sector Scheme **- SAMPADA (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) as "Pradhan Mantri Kisan Sampada Yojana (PMKSY)** " for the period of 2016-20 coterminous with the **14th Finance Commission cycle**. Earlier, CCEA in its meeting held in May, 2017 approved the new Central Sector Scheme - SAMPADA (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) with same allocation and period.

What

1. The **objective of PMKSY is to supplement agriculture, modernize processing and decrease Agri-Waste**.

2. PMKSY with an allocation of Rs. 6,000 crore is expected to leverage investment of Rs. 31,400 crore, handling of 334 lakh MT agro-produce valuing Rs. 1,04,125 crore, benefit 20 lakh farmers and generate 5,30,500 direct/ indirect employment in the country by the year 2019-20.

3. **The implementation of PMKSY will result in creation of modern infrastructure** with efficient supply chain management from farm gate to retail outlet.

4. It will provide a big boost to the growth of food processing sector in the country.

5. It will help in providing better prices to farmers and is a big step towards doubling of farmers' income.

6. It will create huge employment opportunities especially in the rural areas.

7. It will also **help in reducing wastage of agricultural produce**, increasing the processing level, availability of safe and convenient processed foods at affordable price to consumers and enhancing the export of the processed foods.

8. **Food Processing Sector has emerged as an important segment of the Indian economy in terms of its contribution to GDP**, employment and investment. During 2015-16, the sector constituted as much as 9.1 and 8.6 per cent of GVA in Manufacturing and Agriculture sector respectively.ncome for the farmers and creating jobs.

Measures to boost food processing sector

1. **To provide impetus to investment in food processing and retail sector**, govt. has allowed **100% FDI in trading including through e-commerce**, in respect of food products manufactured and / or produced in India. This will benefit farmers

immensely and will create back - end infrastructure and significant employment opportunities.

2. **The govt. has also set up a Special Fund of Rs. 2000 crore in NABARD** to make available affordable credit at concessional rate of interest to designated food parks and agro processing units in the designated food parks.

3. Food and agro-based processing units and cold chain infrastructure have been brought under the ambit of **Priority Sector Lending (PSL)** to provide additional credit for food processing activities and infrastructure thereby, boosting food processing, reducing wastage, create employment and increasing farmers' income.

Flashback
1. **PMKSY is an umbrella scheme** incorporating ongoing schemes of the Ministry like **Mega Food Parks**, **Integrated Cold Chain** and **Value Addition Infrastructure**, **Food Safety and Quality Assurance Infrastructure**, etc. and also new schemes like Infrastructure for Agro-processing Clusters, Creation of Backward and Forward Linkages, Creation / Expansion of Food Processing & Preservation Capacities.

India's first discoms accept Bharat QR

The Andhra Pradesh government said its power distribution companies have started accepting payments through **BharatQR**. The **Eastern Power Distribution Company of AP Ltd (EPDCL)** and the **Southern Power Distribution Corporation of AP Ltd (SPDCL)** are **India's first state-owned discoms** to accept payments through **Bharat QR**.

What
1. **Bharat QR is a common quick response (QR) code** jointly developed by major card payment companies—**National Payments Corp. of India (NPCI)** that runs **RuPay cards**, **MasterCard and Visa**—under instructions from the Reserve Bank of India.

2. **To pay power bills via Bharat QR**, customers must log in to their bank's app and scan the QR code on their electricity bill for instant payment. Alternatively, they may enter their unique customer IDs online and generate a QR code that can be scanned using their bank's app.

3. **Andhra Pradesh power distribution companies** are setting an impressive example for discoms across India to adopt similar systems.

4. Payments company Visa and the state government has identified electricity bill payments as an **important use case for payment digitisation**.

5. **Digitization of such citizen to government payments at scale** would significantly help reduce India's net cost of cash estimated to be 1.7% of its GDP, while accelerating the country's economic growth.

6. **BharatQR was launched on 20 February** and with the less-cash push from the government post demonetization, it has managed to carve a niche for itself in the cashless payments domain.

Rajaswa Gyan Sangam 2017

The **Central Board of Direct Taxes (CBDT)** and **the Central Board of Excise & Customs (CBEC)** have been holding annual Conferences of senior officers for a number of years. **In 2016, for the first time, a joint Conference of the two Boards was held under the umbrella of "Rajaswa Gyan Sangam"** which was inaugurated by the Hon'ble Prime Minister.

What
1. This year also, a joint Conference of the two Boards is scheduled to be held on 1st and 2nd of September, 2017 at Vigyan Bhawan, New Delhi, which will be inaugurated by the Hon'ble Prime Minister in the presence of the Union Finance Minister and Ministers of State(Finance).

2. The Valediction Function will be held on 2nd of September, 2017.

3. **The Rajaswa Gyan Sangam, 2017** will be attended by the senior officers of CBDT and CBEC.

4. **For the first time ever, senior officers of the Finance Department of the States and Union Territories** will be attending this two day event. There will be several Joint Sessions of the officers of the two Boards.
5. The **objective of the Conference is to enable a two-way communication** between the policy-makers and the senior officers in the field offices with a view to increase revenue collection and facilitate effective implementation of law and policies in key result areas.
6. Apart from the joint sessions, separate Technical Sessions of each Board will be held during the two-day Conference. Issues arising in implementation of policies and strategies to achieve targets in core functional areas will also be discussed.
7. Such issues inter alia include HR issues, Litigation Management, Strategies for Revenue Maximisation, Tax Evasion, Taxpayer Services, GST and Customs Reforms and Modernisation.

Hydrological data from China

India has not received hydrological data from China this year despite an agreement, the external affairs ministry said but maintained that it was "premature" to link it with the **recent floods in some parts of the country**. The development comes in the backdrop of the ongoing standoff between Chinese and Indian troops in Dokalam in Sikkim sector.

What

1. **China has shared hydrological data with India** in the backdrop of floods in Assam, there is an existing **expert-level mechanism, established in 2006**, and there are two MoUs under which China is expected to share hydrological data on rivers **Satluj and Brahmaputra** with India during the flood season of May 15 to June 15.
2. **For this year, Not received hydrological data from the Chinese side**, the ministry said. However, it was "premature" to link it with the floods in Assam as there can be "technical reasons" behind China not sharing the data.
3. In **view of floods in Bihar, India was closely coordinating with Nepal, both at Centre and state-level**.
4. In the Donglong (Doklam) area, there is no territorial dispute. The boundary has been delimited and recognised by the two sides.

SC strikes down triple talaq

The Supreme Court held **the practice of Triple Talaq as unconstitutional** with a five-judge bench ruling against **the practice in 3:2 Verdicts**. A five-judge constitution bench **headed by Chief Justice J S Khehar** had reserved its verdict on May 18 after a six-day marathon hearing during the summer vacation.

What

1. Justices Kurian Joseph, UU Lalit, and RF Nariman delivered the majority Judgment, while Chief Justice Khehar and Justice Abdul Nazeer dissented.
2. CJI Khehar, who was in the minority view, upheld **the practice of triple talaq and asked the Union government to bring the legislation on the matter in Six months**
3. During the hearing, **the apex court had clarified that it may not deliberate upon the issue of polygamy** and said it would only examine whether triple talaq was part of an "enforceable" fundamental right to practice religion by the Muslims.
4. The bench, made up of judges from different religious communities -- Sikh, Christian, Parsi, Hindu and Muslim, **had heard seven pleas**, including five separate petitions filed by Muslim women challenging the prevalent practice of 'triple talaq' in the community.
5. The petitioners had claimed that **the practice of 'triple talaq' was unconstitutional**.
6. The Muslim women, who had filed the petitions, have challenged the practice of 'triple talaq' in which the husband pronounces 'talaq' thrice in one go, sometimes even by phone or a text message, to get a divorce.
7. During the hearing, the apex court had observed that the practice of 'triple talaq' was the "worst" and "not a desirable" form of dissolution of marriage among Muslims, even though there were schools of thought which called it "legal".

8. The government had termed all the three forms of divorce among the Muslim community -- **talaq-e-biddat, talaq hasan and talaq ahsan**, as "unilateral" and "extra-judicial".
9. The apex court had said it was keeping open for adjudication in the future the issues of polygamy and 'nikah halala' among Muslims as the Centre had insisted deliberations on these aspects as well.

Niti Action Agenda

Premier think-tank **Niti Aayog has set for the government an ambitious goal of 100 giga watt of clean energy by 2019–20** and wants financial provision for generation and infrastructure rather than just capacity creation. **A renewable energy capacity of 100 GW** should be achieved by 2019–20 so as **to contribute to achievement of 175 GW target by 2022**. The financial support for renewable sector will be aimed at promoting generation and infrastructure creation rather than mere capacity creation," stated the **3–Year Action Agenda unveiled by the Niti Aayog**.

What

1. The Central Electricity Authority monthly report for July, **India has 58.3 GW of renewable energy capacity**, including 32.5 GW wind power, 13.1 GW solar power, 4.3 GW small hydro and 8.1 GW biomass.
2. The Agenda stressed on **the need for developing storage solutions to boost use of clean energy in the country**.
3. It suggested that the state-owned **Solar Energy Corporation of India (SECI)** should develop storage solutions within next three years to help bring down prices through demand aggregation of both household and grid scale batteries.
4. On strengthening the renewable purchase obligations (RPO) system, it favoured creation of a robust market **for renewable power by 2019–20** through effective implementation of RPOs, especially in light of uniform targets.
5. It also called for encouraging renewable rich states to sell power to those with a deficit.
6. The blueprint made a case **for creating a friendly ecosystem for integration of renewable electricity by improving regulatory practices** and better coordination through state-specific renewable action plans.

New cadre policy finalises

A **new policy for cadre allocation** has been finalised by the Central government **for IAS, IPS and other officers**, aimed at ensuring "**national integration**" in the country's top bureaucracy. Officers of all-India services — **the Indian Administrative Service (IAS)**, **Indian Police Service (IPS)** and **Indian Forest Service (IFoS)** — will have to choose cadres from a set of zones instead of states. The officers of the three services are currently allocated a cadre state or a set of states to work in. They may be posted on central deputation during the course of their service after fulfilling certain eligibility conditions.

What

1. **The existing 26 cadres have been divided into five zones in the new policy** proposed by the personnel ministry.
2. **Zone-I has seven cadres** — AGMUT (also known as Arunachal Pradesh-Goa-Mizoram and Union Territories), Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Rajasthan and Haryana.
3. **Zone-II consists of Uttar Pradesh, Bihar, Jharkhand and Odisha**, while **Zone-III comprises Gujarat, Maharashtra, Madhya Pradesh and Chhattisgarh**.
4. West Bengal, Sikkim, Assam-Meghalaya, Manipur, Tripura and Nagaland will **constitute Zone-IV**, while **Zone-V will have Telangana, Andhra Pradesh, Karnataka, Tamil Nadu and Kerala**.
5. The new policy **will seek to ensure that officers from Bihar**, for instance, will get to work in southern and north-eastern states, which may not be their preferred cadres.
6. This policy will ensure national integration of the bureaucracy as officers will get a chance to work in a state which is not their place of domicile.
7. **All-India service officers are supposed to have varied experiences** which can be earned when they work in a different state, which is new to them. The officers may not be able to experiment new things if they work in their own domicile state.

8. Under the new policy, candidates appearing for the civil services examination–conducted annually by the Union Public Service Commission — **will have to first give their choices in a descending order of preference from among the various zones**.

9. **The preference for the zones will remain in the same order and no change will be permitted there**, the policy said.

10. If a candidate does not give any preference for any of the zones/cadres, it will be presumed that he has no specific preference for those zones/cadres.

11. If candidates are not allocated any one of the cadres for which they have indicated a preference, they shall be allotted along with other candidates any of the remaining cadres, arranged in an alphabetical order, where there are vacancies, the policy said.

12. **Candidates will be allotted their home cadre on the basis of merit**, preference and vacancy in the category. The policy is likely to be put into effect from this year.

India's first Farm Price Forecasting Model

Karnataka has signed a **Memorandum of Understanding (MoU)** with Microsoft India to develop a unique "**farm price forecasting model**." The proposed initiative is claimed to be the **first-of-its-kind in the country**. It will aid farmers from states to predict farm prices in advance and deal effectively with the unpredictable market.

What

1. The **farm price forecasting model** will use latest IT tools in a bid to help farmers, administrators and other stakeholders **to understand market behaviour in advance**.

2. It will be a **"multi-variate" platform** that will take into consideration various factors beyond conventional supply-demand equation while forecasting prices of crops.

3. **The model will examine a slew of related factors** including weather, rainfall and external factors that impact market behaviour.

4. It will help **to provide real-time market data**, besides helping analyse its implications on farm sector.

5. The model is expected to be in place for major crops by 2018 kharif season.

Mentor India Campaign launched

The **National Institution for Transforming India (NITI) Aayog** has launched **Mentor India Campaign**, a strategic nation building initiative to engage leaders for guiding and mentoring students at **Atal Tinkering Labs**. The Mentor India Campaign aims **at maximising the impact of Atal Tinkering Labs** by engaging leaders who will nurture and guide students in the Atal Tinkering Labs. Under this initiative, NITI Aayog is looking for leaders who can spend one to two hours every week in one or more such labs to enable students learn experience and practice future skills such as design and computational thinking.

Atal Innovation Mission

1. NITI Aayog's **Atal Innovation Mission** is among one of the flagship programs of the Government **to promote innovation and entrepreneurship in the country** and to set up the Atal Tinkering Labs across the country.

2. It aims to give substantial boost to the innovation ecosystem and to catalyze the entrepreneurial spirit in the country.

3. It prime objective is to provide an innovation promotion platform involving academics, researchers and entrepreneurs, drawing upon national and international experiences to foster a culture of innovation in India.

4. It will also **promote a network of world-class innovation hubs**, Start-up businesses and other selfemployment activities, particularly in technology driven areas.

Swasth Bachche, Swasth Bharat Programme

The **Union Ministry of Human Resource Development (HRD)** launched '**Swasth Bachche, Swasth Bharat**' Programme. It was launched by Union HRD Minister Prakash Javdekar in Kochi, Kerala. The programme is an initiative of **Kendriya Vidyalaya Sangathan (KVS)** to prepare a physical Health and Fitness Profile Card for more than 12 lakhs of Kendriya Vidyalaya students.

About the programme
1. The programme aims **to provide a comprehensive and inclusive report** card for children covering all age groups and children of different abilities.
2. **Its main objective is to make students, teachers and parents** aware about the importance of good health and fitness and encouraging 60 minutes of play each day.
3. The programme also intends **to imbibe values of Olympics and Paralympics amongst students**.
4. The objectives are b**ringing back the childhood amongst children**, make recreational games and physical activity an integral part of learning process, motivating potentially outstanding performers in various games and sports of excellence, using technology for analytics and data capture and giving access to schools, parents and teachers.

India's first calf born to surrogate cow

India's first calf delivered by a surrogate or recipient cow through In Vitro Fertilisation (IVF) technology carried out in a mobile laboratory was born in Indapur, Pune (Maharashtra). It has been named as **Vijay**. This is for first time IVF procedure was successfully implemented at farm level with the help of mobile laboratory. Earlier similar experiment was carried out by the **National Dairy Research Institute (NDRI)** at the lab-level.

What
1. The purpose of **producing surrogate calf** was to protect indigenous cow breeds in its original form which have been destroyed due to cross-breeding.
2. **The experiment was successfully under taken by the JK Trust**, an organisation which works at improving cattle breed.
3. In Vijay's case, the donor cow belonged to the indigenous Gir breed, whose population across the country is **around one lakh** (unevenly spread across Gujarat, Rajasthan and Maharashtra).
4. In this experiment, the oocytes collected from the **mother cow** were kept in a special incubator.
5. Using the IVF technology, these oocytes were fertilised inside the incubator with semen was collected from a **Gir bull**.

> **In IVF technology**
> 1. IVF or **assisted reproductive technology (ART)** is a process of fertilisation.
> 2. In it, **an egg is combined with sperm outside the body**, in vitro (in glass or laboratory dish) to produce embryo.
> 3. **The embryo is then transferred to the uterus** with the intention of establishing a successful pregnancy.

Govt relaxes UDAN norms

The government **unveiled new norms under regional connectivity scheme** to attract more airlines to operate services in Jammu and Kashmir, north-eastern states, Andaman and Nicobar Islands and Lakshadweep. Besides these states, **the Ministry of Civil Aviation (MoCA)** has also included **Himachal Pradesh and Uttarakhand as "priority areas"**. The aim is to increase the services to these states, whose aviation potential at present have not been fully utilised.

What
1. **The MoCA has relaxed the norms of 'UDAN' or the RCS** for these states and union territories. While an RCS airport in priority area can have 14 departures per week, it should be seven for other RCS routes.
2. Civil Aviation Minister Ashok Gajapathi Raju said the scheme is being liberalised and the focus would be on priority areas.
3. The new norms also allow routes with a stage length less than 150 km for operations through fixed wing aircraft. This, the MoCA believes, would enhance connectivity and ease the formation of networks under the scheme.
4. **To encourage helicopter services under UDAN scheme**, the **viability gap funding (VGF) has been increased** and 10% of the estimated annual inflow in the Regional Connectivity Fund has been earmarked for operations through choppers.
5. The second round of bidding RCS routes started and the Ministry expects to announce the names of winners of bidding on November 30.

Task Force on Artificial Intelligence

Commerce and Industry Minister Smt. Nirmala Sitharaman has **constituted a Task Force on Artificial Intelligence (AI) for India's Economic Transformation**. The Minister said with rapid development **in the fields of information technology and hardware**, the world is about to witness a **fourth industrial revolution**. She said driven by **the power of big data**, **high computing capacity**, **artificial intelligence and analytics**, **Industry 4.0** aims to digitise the manufacturing sector. Smt. Sitharaman said the panel will comprise of experts, academics, researchers and industry leaders and will **explore possibilities to leverage AI for development across various fields**. The task force will submit concrete and implementable recommendations for government, industry and research institutions. The task force chaired by Dr. V. Kamakoti, IIT Madras – Chairperson.

Regular members from the organizations

1. NITI Aayog,
2. Ministry of Electronics and Information Technology
3. Department of Science & Technology
4. UIDAI
5. DRDO

Guidelines on data protection

Government think tank **Niti Aayog called for a comprehensive framework on data protection** specially covering digital transactions. Currently, **India has no comprehensive privacy or data protection laws that cover digital payments specifically**. An existing law for data protection, **section 43(A) of the Information Technology Act (ITA)**, offers basic protection," Niti Aayog said in its **three-year action plan**.

What

1. **The recommendation coincides with the Supreme Court order** declaring right to privacy as fundamental right. In the judgement, the apex court too has expressed concern over data privacy of people.
2. **Data related to digital transactions** could be sold and the consequences would be unpredictable. Increasing the number of digital transactions also means the generation of data around these transactions.
3. The report acknowledged that from a **transparency perspective**, the additional data will help with better governance and prevent tax evasion.
4. However, without any clear guidelines on ownership, use and sharing of the data, there is a large scope for misuse.
5. This should be addressed as early as possible as an increasing number of **people transact digitally**.

Videsh Bhavan set up

In a major announcement, **Minister for External Affairs Sushma Swaraj** on 27 August 2017 said that **Videsh Bhavan would be set up in all states** – which would be an umbrella centre for all services related to the foreign ministry. **These will be one-stop centres to provide all facilities given by MEA departments**, Swaraj said inaugurating the pilot **Videsh Bhavan in Mumbai**. The Videsh Bhavan of Mumbai is **located at the Bandra-Kurla Complex**.

What

1. Four offices of MEA in Mumbai, namely, **Passport Office, Office of the Protector of Emigrants, Office of the Regional Director of ICCR, and Branch Secretariat of MEA**, has been integrated and will be functioning from the newly constructed Videsh Bhavan.
2. The Passport Office at Thane has been merged with the Passport Office at Mumbai and the merged offices are functioning at Videsh Bhavan.
3. The Passport Seva Kendras (PSK) at Thane, Thane-II and Nashik will, however, continue to function from the existing premises of these PSK but will be brought under the administrative jurisdiction of the Passport Office at Mumbai.
4. **The Videsh Bhavan at Mumbai is the first integrated office complex of the Ministry of External Affairs established in any State of India**.

INTERNATIONAL

MoU on IPRs approved

The Union Cabinet chaired by the Prime Minister has given its approval to the **Memorandum of Understanding (MoU) between India and Sweden** on cooperation in the field of Intellectual Property (IPRs). The MoU establishes a **wide ranging and flexible mechanism** through which both countries can exchange best practices and work together on training programs and technical exchanges to raise awareness on IPRs and better protect **intellectual property rights**.

Features

A **Joint Coordination Committee (JCC) with members from both sides will** be formed to decide cooperation activities to be taken under the MoU in following areas:

1. **Exchange of best practices**, experiences and knowledge on IP awareness among the public, businesses and educational institutions of both countries;
2. **Collaboration in training programmes**, exchange of experts, technical exchanges and outreach activities;
3. **Cooperation in the development of automation and implementation of modernization projects**, new documentation and information systems in IP and procedures for management of IP;

> **Impact:**
> 1. The MoU will enable India **to exchange experiences in the innovation and IP ecosystems** that will substantially benefit entrepreneurs, investors and businesses on both sides.
> 2. The exchange of best practices **between the two countries will lead to improved protection and awareness** about India's range of Intellectual creations which are as diverse as its-people.
> 3. It will be a landmark step forward in India's journey towards becoming a major player in global Innovation and will further **the objectives of National IPR Policy, 2016**.

4. **Cooperation to understand how Traditional Knowledge is protected**; and the exchange of best practices, including traditional knowledge related databases and awareness raising of existing IP systems;
5. Exchange of information and best practices regarding Intellectual Property law infringements in the digital environment, especially regarding Copyright issues; and
6. Other cooperation activities as may he decided by the Parties with mutual understanding.

India & China join hands at WTO

India and China clasped hands to send a joint proposal to the World Trade Organization (WTO). They jointly called **for the elimination of trade-distorting agricultural subsidies given by developed countries**, the Union commerce ministry said on 31 August 2017. The **India-China proposal**, which was submitted on July 18 when the stand-off in Doklam was at a peak, is to counter the efforts of rich nation members of WTO.

What

1. **This is an important proposal by India and China** in view of the ongoing negotiations for the upcoming 11th Ministerial Conference of the WTO to be held in Buenos Aires in December, the commerce ministry said.
2. The ministerial conference is the **highest decision-making body of the WTO, which meets after a gap of two years**.
3. The India-China joint paper revealed that developed countries, including **the US, the EU and Canada**, have been consistently providing trade-distorting subsidies to their farmers at levels much higher than the ceiling applicable to developing countries.
4. Developed countries have **more than 90% of what is known in WTO parlance as Aggregate Measurement of Support (AMS)** or '**Amber Box**' entitlements amounting to nearly US$ 160 bn.
5. Most of the developing countries, including India and China, do not have AMS entitlements. Therefore, India and China believe that the elimination of AMS

should be the starting point of reforms rather than seek the reduction of subsidies by developing countries.

6. They said developed WTO member nations have access to **huge amount of AMS beyond their "de minimis"**-- the minimal amounts of domestic support that are allowed even though they distort trade. This is supposed to be up to **5% of the value of production for developed countries** and **10% for developing ones**.

7. In reality, countries like India and China have access only to "de minimis" resulting in a major asymmetry in the rules on agricultural trade.

8. **India only provides a subsistence amount of about US $ 260 per farmer per annum** compared to over 100 times more than is given away by some developed countries to their farmer.

9. Listing the most heavily and frequently subsidised products by the US, the EU and Canada since 1995, India and China have sought to illustrate the adverse effects of the concentration of AMS on a few products, which no other proposal in the WTO addresses.

India, Nepal sign eight pacts

India and Nepal signed eight pacts as Prime Minister Narendra Modi re-assured Nepalese Premier Sher Bahadur Deuba of New Delhi's support to the neighbouring country's pursuit for development. **India is fully committed to extend cooperation to Nepal in its pursuit for development** in keeping with the priorities of people and the government of Nepal.

What

1. **Modi also stressed on greater cooperation among the defence and security agencies of India and Nepal**. Deuba said Nepal will never allow any activity from its territory against India.

2. Foreign Secretary S Jaishankar later told mediapersons that India, too, renewed its "continuing commitment" to provide training to personnel of the security forces of Nepal.

3. **Deuba is the first foreign head of a government to visit New Delhi** after the soldiers of India and China got into a face-off at Doklam Plateau in western Bhutan.

4. **Nepal is among the South Asian nations**, where China has been trying to challenge the traditional geopolitical influence of India.

5. Deuba joined Modi to remotely launch two cross-border power transmission lines **Kataiya-Kusaha** and **Raxaul-Parwanipur between India and Nepal**.

6. The two leaders discussed a number of infrastructure projects to be funded by India in Nepal, including building roads, hydro-electric power plant, and petroleum and natural gas pipelines, Jaishankar said.

7. Deuba conveyed to Modi that his government would continue its effort to amend the Constitution of Nepal to address the concerns of Madhesis.

Indianapolis found

Researchers have found the **wreckage of the U.S. warship Indianapolis**, which was **sunk by a Japanese torpedo in the final days of World War Two**, more than 18,000 feet (5.5 kilometers) **below the surface of the Pacific Ocean**, the Navy said. The cruiser was returning from its mission **to deliver components for the atomic bomb** that would soon be dropped on the Japanese city of Hiroshima when it was fired upon in the North Pacific Ocean by a Japanese submarine on **July 30, 1945**. It sunk in 12 minutes, according to the Naval History and Heritage Command in Washington. No distress signal was sent. About 800 of the 1,196 crew members aboard survived the sinking, but only 316 were rescued alive five days later, with the rest **lost to exposure, dehydration, drowning and sharks**.

What

1. After a Navy historian **unearthed new information in 2016** about the warship's last movements that pointed to a new search area, a team of civilian researchers led by Paul Allen, a Microsoft Corp co-founder, spent months searching in a 600-square-mile (1,500-square-kilometer) patch of ocean.

2. With a vessel rigged with equipment that can reach some of **the deepest ocean floors**, members of Allen's team found the wreckage somewhere in the Philippine Sea.

3. **The discovery was a humbling experience** and a means of honoring sailors he saw as playing a vital role in ending World War Two.

Postal stamp for 9th BRICS summit

China issued a **special postal stamp** to commemorate the **ninth annual BRICS summit** scheduled to be held early next month in the **coastal city of Xiamen in the country's southeastern Fujian province**. The stamp issued by the state-owned China Post bears a logo of the summit as well as the **letters "BRICS" and "2017 China"**. It also shows the **scenic Gulangyu Island**, **which was included into the UNESCO list last month**, as well as the other iconic sites of Xiamen like Xiamen University.

What

1. It shows the features of Xiamen," Zhang Zhijun, who is associated with the Xiamen branch of China Post.
2. **The summit is a new starting point for the countries** to sail into a bright future. **The summit will be held from September 3 to 5**.
3. It is the **second BRICS (Brazil, Russia, India, China and South Africa) summit to be held in China**. The previous one was held in Sanya, Hainan province, in 2011.
4. The summit is being held in the **backdrop of border tensions between India and China over the standoff at the Doklam area** in the Sikkim section which has now entered the third month.
5. Prime Minister Narendra Modi, besides leaders of Brazil, Russia, China and South Africa is expected to take part in the summit.
6. **China previously has also issued stamps for the G20 Hangzhou Summit** and the Belt and Road Forum for International Cooperation.
7. The BRICS forum, an independent international organisation encouraging commercial, **political and cultural cooperation between the five-member nations, was formed in 2011**.

India hails New Afghan strategy

India welcomed the much-awaited Donald Trump **strategy on Af-Pak** promising to continue providing "**reconstruction and development assistance**" to Afghanistan after the US asked India to step up its involvement in the war-torn country. India has been most encouraged by Trump's emphasis on "confronting issues of safe havens and other forms of cross-border support enjoyed by terrorists. India shares these concerns and objectives." **For a long time, India, Afghanistan and America's own generals in the Af-Pak Theater** was clear where the problem lay. It is in the sanctuaries in Pakistan, in the support of terrorists by Pakistan's powerful army-intelligence complex.

What

1. **First time when a US president has laid out the core of the US-India strategic partnership**, going beyond South Asia into the Indo-Pacific.
2. Trump has clearly retained his attention on the trade deficits, because in an odd reference, he asked India to help US more in Afghanistan with all the "**billions of dollars**" it makes in trade with the United States.
3. We appreciate India's important contributions to stability in Afghanistan, but India makes billions of dollars in trade with the United States, and we want them to help us more with Afghanistan, **especially in the area of economic assistance and development**.
4. Trump kept his attention on the core problem: For the second time since 9/11, Pakistan has been served with an ultimatum:

Flashback
1. **Since 2001, India has been the fifth largest aid provider to Afghanistan**, there are 16,000 Afghan students studying in India and 4000 Afghan army officers who have been trained in India.
2. Early on, **India built the Zaranj-Delaram highway connecting to the Iran border**, a project that saw many Indian workers and engineers killed by the Taliban.
3. **The Pul-e-Khumri transmission lines and Salma Dam** were also built by India as was the Afghan parliament building.
4. This year, the Indian government has already committed an extra $1 billion to Afghanistan's development

5. **The next pillar of our new strategy is to change the approach** and how to deal with Pakistan. We can no longer be silent about Pakistan's safe havens for terrorist organizations, the Taliban, and other groups that pose a threat to the region and beyond, trump said.
6. Pakistan has much to gain from partnering with our effort in Afghanistan. It has much to lose by continuing to harbor criminals and terrorists.
7. Interestingly, **Trump made a clear connection between Pakistan's terrorists** and its nuclear weapons, highlighting the fears that terrorists could lay their hands on Pakistan's nuclear arsenal.
8. The Indian government will now work on its own **Afghan strategy in the wake of the US decision**.
9. In the coming weeks, **India will roll out more projects and initiatives in Afghanistan to enhance what it has been doing for the past 16 years**, often under trying conditions and under constant terrorist threat by Pak-supported groups like Haqqani network, LeT etc.
10. **This is the first time a US president has publicly reprimanded Pakistan**. Second, he is very clear on the key problem, that is, terrorists and their sanctuaries.
11. The important aspect is that development has to take place side by side. Otherwise, this strategy will not work. The US, Japan, West Asian countries and India have to take the lead in this. **The new approach is pragmatic and workable. It's an opportunity for Pakistan to join in this publicly**.

ECONOMY

World's first diamond futures contracts

The **Indian Commodity Exchange (ICEX)** launched the **world's first diamond futures contracts** to provide exporters with a **hedging tool**. India is a global diamond polishing hub where **14 out of every 15 rough diamonds in the world are polished**. At the launch, the first diamond contract for delivery in November was traded at Rs 3,279/cent. One cent is the one-hundredth of a carat (ct). With over 103 registered members so far, **ICEX has launched 1 ct diamond futures contract for delivery in November** and followed by contracts with monthly settlements. **50 cents and 30 cents contracts** will be introduced after making the initial contract successful. The 1-carat contract for expiry in November, December and January will have delivery centre at Surat.

What

1. **The merger of Ahmedabad-based National Multi Commodity Exchange (NMCE) into ICEX** was also announced. ICEX will soon approach the **National Company Law Tribunal (NCLT)**, Ahmedabad, to initiate the merger procedure. After merger clearance, ICEX would automatically get approval for the launch of some agricultural commodities like rubber, coffee.
2. The journey for diamond futures launch started over two and a half years ago with approaching several ministries to convince about the potential of this contract. With diamond not being a notified commodity, **it was important for the exchange to convince the government officials** about the need of such contract. Diamond was notified as a commodity for derivatives trading on online exchanges.
3. Convincing ICEX Board was also a challenge. **The Securities and Exchange Board of India (Sebi)** has approved the contract after lots of consultations with the physical market intermediaries.
4. **The exchange had to suspend trading in 2014** when its net worth had eroded to little above Rs 40 crore on very thin volume because of stiff competition from its peers.
5. **ICEX has been polling polished diamond prices for over 8-9 months** for the settlement of the contract. Polling prices from the physical market would be used as a benchmark for the settlement of the contract. Price variation would be Re 1 with an initial margin of 5 per cent on value at risk (VAR) basis.
6. ICEX will offer HVS2 quality diamond certified by the **International Institute of Diamond Grading & Research (IIDGR)**, a De Beers group company, and vaulting services will be offered by Malca Amit.

7. The contract has the facility to trade in one cent that can be accumulated over a period of time up to **1 ct and make it deliverable like systematic investment plan (SIP)**.
8. For example, **London Metal Exchange (LME) is popular for its non-ferrous metal contract** with copper being the primary commodity. Similarly, NYMEX (New York Mercantile Exchange), **COMEX (Commodity Exchange)**, **Bursa Malaysia and Multi Commodity Exchange** are known for trading largely in one or two specific commodities and contracts only.
9. India imports rough diamond worth $19 billion and exports polished valued $24 billion annually. India caters to over 90 per cent of the world's polishing market for rough diamonds.

About ICEX
1. **ICEX** is deemed **recognized Stock exchange** providing a **nation-wide on-line trading platform in commodity derivative**.
2. **It is a public-private partnership** with Reliance Capital, MMTC Ltd, Indiabulls Housing Finance Ltd, Indian Potash Ltd, KRIBHCO and IDFC Bank as major shareholders.
3. **It was established under the SCRA, 1956 in terms of Section 131(B) of Finance Act, 2015** pursuant to central Government notification issued in August 2015.

Ease of Doing Business Report 2017

The document released on **Ease of Doing Business report on August 28, 2017** in New Delhi is **based on an Enterprise Survey**, conducted jointly with the **IDFC Institute**. The report itself states that **it is meant to be a research document** and its contents do not represent the views of **the Government of India or NITI Aayog**. The survey was conducted **between April 2015 and April 2016** and does not reflect any changes in the ease of doing business since then. In recent years, **there has been tremendous progress in easing various processes related to doing business**. This has been **verified by the World Bank**. It is important to note that the enterprise responses are based on their past experiences and perceptions on doing business, **dating as far back as 10 years or more**. Reforms such as single window clearance systems would not be applicable to **many firms covered in the survey**.

What

1. **The survey only takes inputs from firms in the formal manufacturing sector**. It does not cover unorganized manufacturing and the services sectors that constitute the vast majority in India.
2. Further, it is important to note that the methodology of the present Enterprise Survey differs from that of the World Bank's Doing Business Survey in the following ways.
3. The World Bank interviews industry leaders while **this survey interviews firms along with some experts in large states**.
4. **The World Bank Survey focuses on Delhi and Mumbai** while this survey covers almost all states and Union Territories in India.
5. The World Bank survey has a **standardized survey across 190 countries**, this survey is a non-standardized survey only for India.
6. The present survey is meant to be qualitative. It does not rank states in the ease of doing business. Its objective is to provide information for states on their business environment.
7. **The World Bank Survey covers 10 parameters handled by the states** and the central government, this survey primarily deals with issues handled by the State Governments
8. The survey finds that firms in **many states take considerably less time in obtaining approvals** than reported by the World Bank data.
9. On average, firms reported taking far less time in getting construction permits. In some states such as Madhya Pradesh and Bihar, getting a construction permit takes even fewer days. Similarly, on average, it took enterprises about half the time to resolve legal disputes as was reported in the World Bank Survey.
10. **The survey indicates that the government's efforts to improve business environment** are showing results on the ground.

11. Overall, the **NITI Aayog-IDFC Institute Ease of Doing Business report** shows that many of the actual experiences of enterprises are better than expert perceptions reported in past surveys.

FDI consolidated policy released

The Commerce Ministry in its consolidated FDI policy document released has for the **first time included start-ups**, which can rise up to **100 per cent of funds** from **Foreign Venture Capital Investor (FVCI)**. Start-ups can issue equity or equity linked instruments or debt instruments to FVCI against receipt of foreign remittance, said the document which incorporates all the changes made in FDI policy over the past year.

What

1. A person resident outside India (other than citizens/ entities of Pakistan and Bangladesh) will be **permitted to purchase convertible notes** issued by an Indian startup company for an amount of **Rs 25 lakh or more in a single tranche**.
2. NRIs can also acquire convertible notes on non- repatriation basis, said the document of **Department of Industrial Policy and Promotion (DIPP)**, Ministry of Commerce.
3. A startup company engaged in a sector where foreign investment requires Government approval may issue convertible notes to a non-resident only with approval of the Government.
4. The government is focusing on startup companies to promote job creation and innovation.
5. **The DIPP which deals with FDI related matters, compiles all policies related to foreign investment regime** into a single document to make it simple and easy for investors to understand.
6. Investors would otherwise have to go through various press notes issued by the department, and the RBI regulations to understand the policy. The government updates the policy every year.
7. **The whole exercise is aimed at providing an investor friendly climate to foreign players** and, in turn, attract more FDI to boost economic growth and create jobs.
8. During the last one year, the government has liberalised FDI policy in over a dozen sectors, including defence, civil aviation, construction and development, private security agencies and news broadcasting.
9. **Foreign investments are considered crucial for India**, which needs around USD 1 trillion for overhauling its infrastructure sector such as ports, airports and highways to boost growth.
10. Foreign investments will help improve the country's balance of payments situation and strengthen the rupee value against other global currencies, especially the US dollar.

Anti-dumping duty extended

The government has extended by **five years the anti-dumping duty** imposed on import of chemical compound **PTFE**, used as a **non-stick coating for pans and other cookware**, to safeguard the domestic industry. The revenue department has issued a notification imposing $2,637 per tonne as anti-dumping duty on imports of **polytetraflouroethylene (PTFE) from China**. **The duty was first imposed for five years in August 2011** and extended by **one year last August**.

What

1. A review of the anti-dumping duty has concluded that "**there is continued dumping of the product concerned from China**, both in absolute terms and in relation to production and consumption in India, causing injury to the domestic industry".
2. Chinese producers have "**significant capacity** which establishes that in the event of **cessation of duties, exports to India will intensify**".
3. The anti-dumping duty imposed shall be effective for a **period of five years** (unless revoked, superseded or amended earlier).
4. India imposes anti-dumping duty to ring-fence the domestic industry from an increase in cheap price import.
5. The "anti-dumping duty is in force on **93 products concerning imports from China**.

6. India's imports from China dipped to $61.28 billion in 2016-17 as against $61.7 billion in the previous year.

Creamy layer to PSUs

Twenty four years after its introduction in the government, the Union Cabinet on 30 August 2017 decided **to** extend the **concept of creamy layer in OBC reservations to Public Sector Undertakings (PSUs) and financial institutions**. The Cabinet, which had last week **raised the annual income ceiling of Rs 6 lakh to Rs 8 lakh for eligibility for reservations for Other Backward Classes**, decided on extending the concept at its meeting.

What

1. The government had decided **the criteria for deciding the creamy layer on the basis of income and status in 1993**, the concept of creamy layer itself was not implemented in PSUs and financial institutions like banks and insurance companies.

2. Now, **on the advice of the Group of Ministers**, the cabinet has given its approval" to implement it.

3. **Now the same limit of Rs 8 lakhs**, which is applicable on central government, **will also be applicable on PSUs and financial institutions**.

4. With regards to status, **candidates whose parents hold constitutional posts or group A and B posts are excluded**.

5. The minister said that with these decisions, the benefits will spread more widely in the OBC community.

6. **This will ensure that the children of those serving in lower categories in PSUs** and other institutions can get the benefit of OBC reservations, on par with children of people serving in lower categories in government.

7. This will also **prevent children of those in senior positions in such institutions** -- who, owing to absence of equivalence of posts, may have been treated as non-creamy layer -- from cornering government posts reserved for OBCs and denying **the genuine non-creamy layer candidates a level playing field**.

Flashpoint

1. **Polytetrafluoroethylene (PTFE)**, a strong, tough, waxy, nonflammable synthetic resin produced by the **polymerization of tetrafluoroethylene**.

2. Known by such trademarks as **Teflon, Fluon, Hostaflon, and Polyflon**, PTFE is distinguished by its slippery surface, high melting point, and resistance to attack by almost all chemicals.

3. These properties have made it familiar to consumers as the coating on nonstick cookware; it is also fabricated into industrial products, including **bearings, pipe liners, and parts for valves** and pumps.

4. **PTFE** was discovered serendipitously **in 1938 by Roy Plunkett**, an American chemist for E.I. du Pont de Nemours & Company (now DuPont Company), who found that a tank of **gaseous tetrafluoroethylene** refrigerant had polymerized to a white powder.

SCIENCE AND TECHNOLOGY

India's first IoT platform

Home-grown technology and **Internet of Things (IoT) company Smartron** unveiled **'tronX' – an Artificial Intelligence (AI) -** powered **IoT platform** that would help make users' daily life easier and smarter. Terming it as **one of the first global technologies being developed in India**, the company said **'tronX' is an intelligent ecosystem** that helps connect a range of devices.

What

1. It was built on the world of **'Internet of Trons'**, the ecosystem **allows instant access to profile, data, content, services, Cloud, care, community and other IoT devices** whether you are at home, in the car or at the office.

2. **Smartron has been working for more than two years on creating a new connected ecosystem fuelled by AI-powered 'IoT'** and 'tronX' is at the core of this brave new world.

3. The platform has been designed to deliver "**highly intelligent and localised experiences**, services and care support critical to IoT success".
4. The platform would switch on the geyser for you and as the system goes through your daily schedule, it will even book a cab for you.
5. To begin with, Smartron announced four verticals that are in the works at its R&D facility and already have built in capabilities that integrate in our lives: 'tronX Personal', 'tronX Health', 'tronX Home' and 'tronX Infra'. 'tronX Personal' offers personalised entertainment, travel, shopping, financial, health, event, communication and collaboration experiences across devices and contexts.
6. **'TronX Infra' is Smartron's B2B vertical**, offering an AI-assisted system that covers a range of monitoring and management services, thus increasing productivity and security for enterprises.
7. Smartron was founded with a vision to build India's first true global OEM brand to revolutionise the country's ecosystem and create experiences that are on par with global innovations.

Solar corona predicted

Indian scientists have predicted **how the solar corona – the mysterious outer region of the Sun - would look like during the total solar eclipse**. Their predictions show lotus petal-like shapes extending from the surface in some parts of the Sun's corona, while in other parts, magnetic field lines fan out like spokes of a wheel. The total solar eclipse of Aug 21, 2017, was last over **the US landmass for nearly 90 minutes**, giving scientists an unprecedented opportunity to make scientific measurements from the ground.

What

1. NASA is supporting 11 ground-based science investigations, six focusing on the **Sun's corona**.
2. Indo-UK team of researchers predicted the expected looks of the solar corona that will be visible during the eclipse. Normally the solar corona is not visible as it is fainter than the disk.
3. The Indo-UK researchers, led by solar physicist Dibyendu Nandi from the Centre of Excellence in Space Sciences India at the **Indian Institute of Science, Education and Research (IISER), Kolkata** is one of the two research groups that made a forecast on the solar corona pattern.
4. **This is for the first time the IISER team predicted the shape of the corona**.
5. The other agency is a US-based company named Predictive Sciences that is researching on solar corona for the last five years.
6. The Indian model used sun spot data up to August 16. The scientists ran the model until August 21 before the prediction.
7. The total solar eclipse will provide them with an opportunity to test and refine the model that may come handy during the **Indian Space Research Organisation's Aditya mission in the future**.

New 'state of matter' found

Scientists have discovered a **potential new state of matter** that may help explain phenomena like **superconductivity**. Superconductivity is extensively used in **magnetic resonance imaging (MRI)**, **particle accelerators**, **magnetic fusion devices**, and **microwave filters**. Researchers from Los Alamos National Laboratory in the US showed that among superconducting materials in high magnetic fields, the phenomenon of electronic symmetry breaking is common.

What

1. The ability to find similarities and differences among classes of materials with phenomena such as **this helps establish the essential ingredients that cause novel functionalities such as superconductivity**.
2. The high-magnetic-field state of the heavy **fermion superconductor CeRhIn5 revealed a state** in which the material's electrons aligned in a way to reduce the symmetry of the original crystal, something that now appears to be universal among unconventional superconductors.
3. **Unconventional superconductivity develops near a phase boundary separating magnetically ordered** and magnetically disordered phases of a material.
4. The appearance of the electronic alignment, called nematic behaviour, in a prototypical heavy-fermion superconductor highlights the interrelation of

    nematicity and unconventional superconductivity, suggesting nematicity to be common among correlated superconducting materials.

5. Heavy fermions are intermetallic compounds, containing rare earth or actinide elements.
6. These heavy fermion materials have a different hierarchy of energy scales than is found in transition metal and organic materials, but they often have similar complex and intertwined physics coupling spin, charge and lattice degrees of freedom.

Method to converts tree leaves into electronic devices

    Scientists have discovered a **new method to convert dried tree leaves into a porous carbon material** that can be used to **produce high-tech electronics**. Researchers from Qilu University of Technology in **China used a multi-step**, yet simple, process to convert phoenix tree leaves into a form that could be incorporated into electrodes as active materials.

What

1. The dried leaves were first ground into a powder then heated to 220 degrees Celsius for 12 hours.
2. This produced a **powder composed of tiny carbon micro spheres**.
3. These micro spheres were then treated with a **solution of potassium hydroxide** and heated by increasing the temperature in a series of jumps from **450 to 800 degrees Celsius**.
4. **The chemical treatment corrodes the surface of the carbon micro spheres**, making them extremely porous. The final product, a **black carbon powder**, has a very high surface area due to the presence of many tiny pores that have been chemically etched on the surface of the micro spheres.
5. The high surface area gives the final product its **extraordinary electrical properties**.
6. The researchers ran a series of standard electrochemical tests on the porous micro spheres to quantify their potential for use in electronic devices.
7. **The current-voltage curves for these materials indicate that the substance could make an excellent capacitor**. Further tests show that the materials are, in fact, supercapacitors, with **specific capacitances of 367 Farads/gramme**, which are over three times higher than values seen in some **graphene supercapacitors**.
8. A capacitor is a widely used electrical component that stores energy by holding a charge on two conductors, separated from each other by an insulator.
9. **Supercapacitors can typically store 10 to 100 times** much energy as an ordinary capacitor, and can accept and deliver charges much faster than a typical rechargeable battery. For these reasons, **supercapacitive materials hold great promise for a wide variety of energy storage needs**, particularly in computer technology and hybrid or electric vehicles.
10. The supercapacitive properties of **the porous carbon microspheres** made from phoenix tree leaves are higher than those reported for carbon powders derived from other bio-waste materials.
11. The fine scale porous structure seems to be key to this property, since it facilitates contact between electrolyte ions and the surface of the carbon spheres, as well as enhancing ion transfer and diffusion on the carbon surface.

Plant-based polio vaccine developed

    Scientists have developed a **new polio vaccine using plants**, a breakthrough which can pave the way for global eradication of the **age-old viral disease**. Researchers from John Innes Centre, Norwich in the UK produced the novel vaccine with a method that uses **virus-like particles (VLPs) – non-pathogenic mimics of polio virus** which are grown in plants.

What

1. Genes that carry information to produce VLPs are infiltrated into the **plant tissues**. The host plant then reproduces large quantities of them using **its own protein expression mechanisms**.
2. This is an incredible collaboration involving plant science, animal virology and structural biology. The question for us now is how to scale it up – we do not want to stop at a lab technique.

3. **VLPs look like viruses but are non-infectious**. They have been biologically engineered so they do not contain the nucleic acid that allows viruses to replicate.

Free new-age email service

Rajasthan is the first state in the country to offer free new-age email service for communication and **e-vault for storage of documents**. At the launch of Rajasthan Digifest, 2017 Chief Minister Vasundhara Raje said **it's a unique initiative to provide free e-mail and e-vault facility to every citizen of the state**.

What

1. **There is a unique start up a platform called I-Start**, which would serve as a single point for registration, functioning, support and hand-holding for the start up firms as well as Angel funding groups and venture capital institutes.
2. At the launch of the **free new age email service**, she also dedicated another portal named **Rajasthan Stack** to the public and stated that all these things would add to a positive healthy competitive environment in the state.
3. She also invited the youth to accept the Challenge for Change, an initiative through which the state government would offer direct work orders worth up to Rs. 1 crore to the young minds.

More effective way to treat HIV

Scientists have discovered a **more effective way to treat people suffering from HIV whose bodies** have built a resistance to drug '**cocktails**' currently used to keep them healthy. Researchers from University of South Carolina (USC) in the **US identified a novel human protein variant** that can be targeted to prevent the human immunodeficiency virus from harming HIV-positive individuals.

What

1. **Most HIV drugs target the virus but the virus is not stable**, it always mutates – problematic because the virus can become resistant to effective drugs. The **new study focused on HIV-1**, the most widespread version worldwide.
2. **HIV can be classified into R5 and X4 viruses**. R5 viruses are exclusively associated with primary infection, and **X4 viruses emerge in later stages of HIV diseases in half of HIV carriers**.
3. Detection of X4 is an indication that the patient's HIV infection has progressed to a very toxic state.
4. Researchers identified a novel variant within the previously identified family of proteins.
5. **They nicknamed it "Delta 20**," an immune system protein that suppresses the most damaging HIV strains, X4, by preventing the virus from infecting cells.

This method differs from the **more traditional method of targeting viruses** that may eventually become resistant to specific medical therapies

MISCELLANEOUS

Agriculture award

As a reward to the hard work and commitment to develop agriculture sector in **the newly formed State, Telangana Chief Minister K Chandrashekhar Rao** was selected for the prestigious **National Agriculture Leadership Award-2017** by the **Indian Council of Food and Agriculture (ICFA)** under the chairmanship of well known agriculture scientist **Prof MS Swaminathan**.

What

1. The Chief Minister was chosen for the award for the **path braking measures adopted by the Telangana government** which benefiitted millions of farmers.
2. Tha launch of many schemes by the government brought a **positive impact on therural sector under the leadership of K. Chandrashekhar Rao**.
3. The ICFA requested the Chief Minister to **personally come and collect the award in presence of national level** gathering of important stake-holders at New Delhi on September 5 during the 10th Global Agriculture Leadership Summit.
4. Under the leadership category, **Rao was shortlisted by the National Awardee Committee, which met on August 1**. The Chief Minister got recognition for the

role he played in individual and organization category towards the development of Indian Agriculture and bringing prosperity in rural segment.

5. Earlier prominent personalities such as **MS Swaminathan (2009)**, **Balram Jakhar (2010)**, Sharad Pawar(2011), PK Dhumal(2012), Dr Raman Singh(2013), Prakash Singh Badal(2014), Akhilesh Yadav(2015), Shivarj Singh Chauhan and Ratan Tata (2016) received **ICFA leadership award for their contribution in Agriculture sector**.

Panels for film fest reconstituted

The **Information and broadcasting (I&B) Ministry has reconstituted the steering committee and technical committee** for the upcoming International Film Festival of India to be held in Goa from November 20. While multiple national and international award-winning Film Director from Assam **Jahnu Barua was made convener of the 13-member steering committee for IFFI-2017**, film director and actor Nagesh Kukunoor, known for his works in parallel cinema like Hyderabad blues, was appointed as the chairperson of the 12-member technical committee for the film festival.

What

1. **Kukunoor was also inducted as a member of the steering committee**, according to a press handout issued by the I&B Ministry.

2. Newly appointed chief of the **Central Board of Film Certification (CBFC)** Prasoon Joshi, filmmaker Anand Gandhi, BJP leader and actor Vani Tripathi were inducted as members in the steering committee among others.

3. The ministry earlier postponed a meeting of a preview committee set up to select films for the international festival at Goa, amid reports that Union minister Smriti Irani may dissolve the group.

Flashback

1. **Central Board of Film Certification (CBFC)** is a statutory body under **Ministry of Information and Broadcasting**, regulating the public exhibition of films under the provisions of the **Cinematograph Act 1952**.

2. Films can be publicly exhibited **in India only after they have been certified by the Central Board of Film Certification**.

3. The Board consists of non-official members and a Chairman (all of whom are appointed by Central Government) and functions with **headquarters at Mumbai**.

4. **It has nine Regional offices**, one each at Mumbai, Kolkata, Chennai, Bangalore, Thiruvananthapuram, Hyderabad, New Delhi, Cuttack and Guwahati.

5. The Regional Offices are assisted in the examination of films by Advisory Panels.

6. The members of the panels are nominated by Central Government by drawing people from different walks of life for a **period of 2 years**.

Exercise with SCO nations

India offered to host a joint urban earthquake search and **rescue exercise with the Shanghai Cooperation Organisation (SCO) member** nations, including **China and Pakistan**, in 2019 to better respond to emergencies in case of natural disasters. It was delivered the country statement at the **9th meeting of the heads of government of the SCO** dealing with the prevention and elimination of emergency situation. The exercise will be very useful in improving the **collective preparedness**.

What

1. **The search and rescue teams engage in a joint exercise**, they not only build a common understanding of internationally recognised procedures to coordinate in emergencies, they also build personal acquaintances and friendships that come in handy when they have to respond together.

2. India offers to host a joint exercise on **urban earthquake search and rescue in 2019**.

3. The home minister's statement bears significance as if it happens all SCO members, including **China and Pakistan**, will participate in it. Singh also said India is ready to host the next meeting of the SCO head of departments dealing with disaster prevention.

4. **Founded in 2001, the SCO member countries are**: China, Kazakhstan, Kyrgyz Republic, Russia, Tajikistan, Uzbekistan, India and Pakistan, and the bloc is headquartered in Beijing.
5. India and Pakistan had joined the SCO, the China-dominated security grouping, in June in Kazakhstan capital Astana. Prime Minister Narendra Modi had attended the summit.
6. The home minister said between **1996 and 2015, the SCO countries have lost 3, 00,000 lives to natural disasters**. The economic losses from disasters are also extremely high and cascading.

New Chief Justice of India

Justice Dipak Misra was sworn in as the 45th Chief Justice of India on 28 August 2017. He was administered the oath of office by President Ram Nath Kovind during a brief ceremony in the Darbar Hall of Rashtrapati Bhawan.

What

1. **64-year-old Justice Misra** is the senior-most judge of the Supreme Court after Justice Khehar.
2. **He will be the third person from Odisha** to be appointed the Chief Justice of India, after Justices Ranganath Misra and G B Pattanaik.
3. Justice Kekher who did injustice to Muslim women by voting against in the (split) verdict that declared **Triple Talaq illegal is out and gone** .
4. Justice Misra-headed benches have upheld the constitutional validity of **Sections 499 and 500 of IPC** providing for criminal defamation proceedings, as well as the death penalty for convicts in the gruesome Nirbhaya gang rape and murder case.
5. As chairman of National Legal Services Authority, he has introduced several measures to provide legal aid to poor litigants.
6. **Chief Justice Misra will retire on October 2, 2018**.

7th in influence on global affairs

India is ranked seventh in the the world in terms of positive influence on global affairs, an international online survey has found. A new Ipsos MORI poll of 18,000 respondents across 25 nations shows India among top ten countries with the most positive influence on world affairs. The poll, which collected feedback from people aged 16-64, proclaimed that **only 40 per cent think the US has a positive influence on the world stage**. That's less than China at 49 per cent and not far ahead of **Russia at 35 per cent**. Canada, however, topped the list while US is just ahead of **Russia, Israel and Iran**.

What

1. According to the poll, the respondents said they see **the US influence as less negative than when President George W Bush retired in 2009**.
2. In Europe, amid the turmoil of Brexit, **the EU and the United Kingdom are both seen as having a positive influence by 57% of respondents**. While that's the same result as last year for the EU, the UK's rating has dropped by 10 points.
3. **Israel and Iran are at the bottom of the ranking with only 32 per cent and 21 per cent of people respectively** viewing their global influence in a positive light.
4. Ipsos MORI also asked about international organisations in the poll and when they were included in the results, it becomes clear that reputational damage is not confined to nation states.
5. **While the United Nations ranks 4th**, it has dropped nine points since last year.
6. The World Bank and IMF have both experienced a 7 point drop in approval but still sit ahead of China and the United States.
7. **China, India and Saudi Arabia were found to be the most positive** about the direction their nations are taking.
8. Almost 87 per cent of those surveyed in China think their country is going in the right direction, with 74 per cent in India and 71 per cent in Saudi Arabia believing the same," Ipsos said in its monthy report titled "**What Worries the World**".
9. It also said top three worries for Indian's were corruption, unemployment and crime. The Chinese were most vexed about 'moral decline', the environment and unemployment. And for the Saudis, unemployment, terrorism and taxes were the most worrisome.

End of Doklam standoff

The **71-day military standoff at Doklam**, on the **tri-junction of the Indian, Chinese and Bhutanese borders**, has been defused without armed confrontation and

bloodshed. In a coordinated announcement, the Indian and Chinese foreign ministries both announced that **troops were disengaging at the Doklam bowl**, where they have been in eyeball-to-eyeball contact since June 16, when the Indian Army moved hundreds of soldiers and two bulldozers into the disputed area to **block road construction by China**.

What

1. **Beijing announced that "On the afternoon of August 28**, the Indian side has pulled back all the trespassing personnel and equipment to the Indian side of the boundary and the Chinese personnel on the ground has (sic) verified this.

2. Indian government sources say **the challenge during the negotiations over withdrawal was to maintain Chinese "face"**, while obtaining an assurance from Beijing that it would halt road building in the area, an activity that India's military says compromises its defensive positions.

3. **This issue was intelligently finessed with Beijing announcing**, "China will continue to exercise its sovereignty and uphold its territorial integrity in accordance with historical conventions." No mention was made of China's right to build a road in Doklam.

4. Regional watchers have speculated whether the disengagement agreement provided for China to establish diplomatic relations with Bhutan, something that India has discouraged under the terms of a treaty between New Delhi and Thimphu. However, well-informed media sources in Thimphu deny any such quid pro quo.

5. **India has never objected to China patrolling the Doklam bowl**, which is disputed between China and Bhutan. A Chinese road, however, is regarded as an unacceptable change in the status quo, which is expressly forbidden by a 2012 agreement between Beijing and New Delhi.

6. In a marked change of tone from the hostility that had pervaded official Chinese statements and official media reportage since the **Doklam faceoff began**, Beijing's foreign ministry spokesperson stated: "The Chinese government highly values its friendly relationship with India. We hope India can fulfill the historic agreement on the border and safeguard the stability of the border area with China."

7. Even as soldiers built up on both sides towards the end of June and a barrage of strident statements emanated from Beijing, the Indian government maintained a discreet silence except for an official press release on June 30, laying down India's version of events.

8. **MEA A release issued of Ministry of External Affairs** The release, entitled "**Recent Developments in Doklam Area**" stated that India had intervened to block Chinese road building activity after a **Royal Bhutan Army patrol had tried to stop the Chinese**, who were in violation of two agreements between China and Bhutan.

9. **India had intervened at Bhutan's behest**, the release stated that Thimphu and New Delhi have been in continuous contact through the unfolding of these developments.

10. **For most observers of Sino-Indian relations**, the mutual withdrawal is a huge win for India that will significantly enhance its regional status and its standing with South Asian neighbours like Bhutan, Nepal, Myanmar, Bangladesh and Sri Lanka.

11. **Another feature of this crisis is Bhutan's remarkable** and consistent demonstration of support to India. Thimphu first confronted Beijing through a demarche on June 20 and then a government statement on June 29, protesting China's road-building in Doklam and, thus, allowing **India to justify its intervention**.

Species 205

Union Agriculture and Farmers Welfare Minister, Shri Radha Mohan Singh addressed a gathering at "100 years of Excellence In Sugarcane Research: **variety 205 to variety 0238" (sugarcane variety)** and "**New India Manthan – Sankal Se Siddhi" events**, organised by **ICAR- Sugarcane Breeding Institute, Regional Centre, Karnal**. Shri Singh informed the gathering that with the help of Sir Dr Venkatraman, for the first time, **hybrid clone variety 205** (Saccharum officinarum and Saccharum spontaneum) was developed for **sub-tropical climate,** which was launched **in 1918 for commercial farming**.

The **hybrid** clone led to 50% increase in sugarcane production in North India and popular species like **Saccharum Barberi** and **Saccharum Sinensis** were left far behind.

What

1. Shri Radha Mohan Singh said that **after developing species 205**, Sugarcane Breeding Institute developed several **other hybrid clones for sub-tropical condition** and they remained sought after for a long time.
2. After that, **the institute developed species 312**, first amazing cane variety for **the subtropical climate in 1928 and in 1933**, it developed species 419 for tropical climate.
3. **During three years of Modi government, a significant increase in sugarcane yield** and sugar recoveries have been witnessed in the northern states after expansion of **species 0238 in the region**.
4. In the last season, **0238 was cultivated in 36% cane area in Uttar Pradesh**, **63% in Punjab**, **39% in Haryana**, **17% in Uttarakhand**and 16% in Bihar.
5. **Species 0238 and 0118 have become the first choice of sugar mills in north India**. The sugarcane farmers are reaping higher yield from the species 0238 and sugar mills are getting more sugar.
6. Sugarcane farmers can make the best of intercropping technique and increase their income by growing oilseeds, pulses, potatoes, and cucumber with cane.
7. **On August 9, 1942**, using sacrifice, penance, and courage as their tool, the youth pledged to free India from barbarous British Rule and the movement led to the country's freedom in 1947.

UN opens uranium bank

The **International Atomic Energy Agency (IAEA)**, the UN global nuclear watchdog, opened a **uranium bank in Kazakhstan** on 29 August 2017, a \$150-million facility designed to discourage new nations from enriching the nuclear fuel. **The Low Enriched Uranium (LEU) Bank in the city of Oskemen**, in eastern Kazakhstan, will store up to **90 tonnes of the fuel**, enough to power a large city for three years, and sell it to IAEA members if they are unable to procure it elsewhere.

What

1. **The LEU Bank will serve as a last-resort mechanism** to provide confidence to countries that they will be able to obtain **LEU for the manufacture of fuel for nuclear power plants** in the event of an unforseen, non-commercial disruption to their supplies.
2. Countries such as **Iran have said they need enrichment facilities** to ensure a steady supply of fuel for nuclear power plants, and the idea behind the bank is to make such supply available without domestic enrichment.
3. **Russia has operated a similar bank since 2010** but the one in Kazakhstan will be the first one fully owned and operated by the global nuclear watchdog.
4. The IAEA LEU bank, **Kazakhstan has made another contribution to strengthening the global non-proliferation regime**.
5. **It would begin buying uranium soon**, with the aim to ship it to the bank next year.
6. The project was funded by donors, including **the United States, the European Union, Kuwait, the United Arab Emirates, Norway and the Nuclear Threat Initiative**.

Saraswati Samman 2016

Mahabaleshwar Sail (74) was bestowed with prestigious **Saraswati Samman 2016**. He was awarded for his novel "Hawthan (हावटण)" that captures cultural lives of traditional potter community in Goa. He was presented the award, comprising plaque and a cash purse of Rs.15 lakh by Union minister for commerce and industry Nirmala Sitharaman at event held in New Delhi.

What

1. **Mahabaleshwar Sail is bilingual writer based in Goa**.
2. He has written four Marathi dramas and seven Konkani novels.
3. He has also written **five short stories** and novel in Marathi.
4. He is best known for his work '**Paltadcho Munis**', which had inspired film by same name.

5. **His work 'Hawtham' was published in 2009**. He has received Sahitya Akadami Award in Konkani language for his short story collection 'Taranga' in 1993.
6. Mahabaleshwar Sail was born on 4 August 1943 in Shejebag in Uttara Kannada district of Karnataka.
7. **He had served in Indian Army** and had participated in 1965 Indo-Pakistani War.
8. He also had served as UN peacekeeper in 1964-1965 at Israel and Egypt border.

Saraswati Samman
1. **Saraswati Samman is an annual award** bestowed upon Indian citizen for his outstanding literary work written in any **22 Indian language mentioned in Schedule VIII of Constitution** and published during last 10 years.
2. The award has been named after Indian goddess of learning Saraswati.
3. It is considered one of the highest literary awards in India.
4. **It was established in 1991 by the KK Birla Foundation**.
5. It carries cash prize of 15 lakh rupees, a citation and a plaque of goddess Saraswati.
6. **Harivansh Rai Bachchan was first recipient of this award** for his autobiography published in four volumes.

National Sports Day

The **National Sports Day** is observed **every year on 29th august** to birth anniversary of the legendary hockey player **Dhyan Chand** who was born on 29 August 1905. To celebrate the day, Government had conducted various programs throughout the country. On this occasion, President **Ram Nath Kovind** presented National sports Awards to 29 players. The President conferred Rajiv Gandhi Khel Ratna Award, Arjuna Award and Dronacharya Award.

About Dhyan Chand
1. The legendary hockey player was born on **29 August 1905 in Allahabad, Uttar Pradesh**.
2. He is widely considered as the **greatest field hockey player of all time**.
3. He had started playing hockey only after joining the Army at the age of 16.
4. He was famously known as **'The Wizard' for his superb ball control and had scored more than 1000 goals** during his international career.
5. He is mostly remembered for his extraordinary goal-scoring feats, in addition to earning 3 Olympic gold medals in field hockey in 1928 (Amsterdam), 1932 (Los Angeles) and 1936 (Berlin).

International Day against Nuclear Tests

The **International Day against Nuclear Tests** was observed across the world on 29 August with an aim **to raise awareness about the effects of nuclear weapon** test explosions or any other nuclear explosions. The day seeks **to promote peace and security world-wide** and **calls for urgent need to prevent nuclear catastrophes** to avert devastating effects on humankind, environment and the planet. It also highlights urgent need for cessation of nuclear weapons as one of the means of achieving the goal of a nuclear-weapon-free world.

What
1. **The International Day against Nuclear Tests** was instituted by the **United Nations General Assembly (UNGA)** by unanimously adopting resolution in December 2009.
2. The resolution was initiated by **Kazakhstan** with support of large number of sponsors and cosponsors with a view to commemorate closure of Semipalatinsk Nuclear Test site on 29 August 1991.
3. **The Day was first observed in 2010** and since then observed annually to galvanize the necessity of banning nuclear weapon tests.

New Election Commissioner

The law ministry on 31 August 2017 said that **former bureaucrat Sunil Arora has been appointed as the new Election Commissioner**. After Nasim Zaidi retired as the Chief Election Commissioner in July, there was a vacancy in the poll panel. Presently, while **Achal Kumar Joti is the CEC**; Om Prakash Rawat is the other Election Commissioner. Arora's appointment will be with effect from the day he assumes charge, the law ministry notification said.

What

1. **Arora (61) had been the Information and Broadcasting Secretary**, and Secretary in the Ministry of Skill Development and Entrepreneurship.
2. A 1980 batch IAS officer of the Rajasthan cadre, Arora has worked in ministries and departments such as Finance, Textiles and Planning Commission.
3. He also served as Joint Secretary in the Ministry of Civil Aviation during 1999-2002 and CMD, Indian Airlines for five years (two years as additional charge and three years as full charge).
4. In Rajasthan, besides district postings in Dholpur, Alwar, Nagaur and Jodhpur, he was Secretary to the Chief Minister during 1993-1998 and Principal Secretary to CM (2005-2008) and handled Information and Public Relations (IPR), Industries and Investment Departments.

World Humanitarian Day

The **World Humanitarian Day (WHD)** is observed every year on 19 August **to recognize work of humanitarian personnel** and those who have lost their lives. The campaign theme for this year is **Not A Target**. The observance of the day also provides an opportunity to celebrate the spirit that inspires humanitarian work around the globe. It pays tribute to aid workers who risk their lives in humanitarian service and also to rally support for people affected by crisis around the world.

Background

1. The **World Humanitarian Day** was instituted by the **United Nations General Assembly (UNGA)** by passing a resolution.
2. The resolution passed by UNGA on the Strengthening of the Coordination of Emergency Assistance of the United Nations was sponsored by Sweden.
3. The day coincides with **the anniversary of the 2003 bombing of the UN headquarters in Baghdad, Iraq**.
4. In this bombing, then Special Representative of the UN Secretary-General to Iraq, Sérgio Vieira de Mello and his 21 colleagues were killed.