

# My Notes....

## National

### India Rankings 2017

The Union Minister of Human Resource Development, Shri Prakash Javadekar, released the India Rankings 2017 for the Educational Institutions and dedicated it to the nation in New Delhi. This step is a sequel towards bringing landmark changes in the quality of education provided to students across the country for which we are working relentlessly. This ranking is meant to have beginning of a fair competition among the institutions for achieving excellence in their efforts. This second edition of India Rankings, a total of 2995 institutions have participated this time. This includes 232 Universities, 1024 Engineering Institutions, 546 Management Institutions, 318 Pharmacy Institutions and 637 General Degree Colleges, and others.

#### What

1. The parameters used for India Rankings 2017 are broadly similar to those used last year. However, at the level of detail, some of the sub-parameters have been tweaked for a more robust system of rankings.
2. All research related information, including publications, citations, highly cited papers and even patent information about institutes was collected from third party databases (from our industry partners) to obtain an objective and unbiased picture.
3. **For this year's Perception inputs, a large data base of academic and industry peers and employers was deployed, in addition to getting inputs from members of general public.**

#### Engineering

1. Indian Institute of Technology, Madras, Tamil Nadu
2. Indian Institute of Technology, Bombay (Mumbai), Maharashtra
3. Indian Institute of Technology, Kharagpur, West Bengal
4. Indian Institute of Technology, New Delhi, Delhi
5. Indian Institute of Technology, Kanpur, Uttar Pradesh
6. Indian Institute of Technology, Roorkee, Uttarakhand
7. Indian Institute of Technology, Guwahati, Assam
8. Anna University, Chennai, Tamil Nadu
9. Jadavpur University, Kolkata, West Bengal
10. Indian Institute of Technology, Hyderabad, Telangana

List of top 10 India Rankings 2017 is as follows:

#### Overall:

1. Indian Institute of Science, Bangalore, Karnataka
2. Indian Institute of Technology, Madras (Chennai), Tamil Nadu
3. Indian Institute of Technology, Bombay (Mumbai), Maharashtra
4. Indian Institute of Technology, Kharagpur, West Bengal
5. Indian Institute of Technology, New Delhi, Delhi
6. Jawahar Lal Nehru University, New Delhi, Delhi
7. Indian Institute of Technology, Kanpur, Uttar Pradesh
8. Indian Institute of Technology, Guwahati, Assam
9. Indian Institute of Technology, Roorkee, Uttarakhand
10. Banaras Hindu University, Varanasi, Uttar Pradesh

#### Management

1. Indian Institute of Management, Ahmedabad, Gujarat
2. Indian Institute of Management, Bangalore, Karnataka
3. Indian Institute of Management, Calcutta, West Bengal
4. Indian Institute of Management, Lucknow, Uttar Pradesh
5. Indian Institute of Management, Kozhikode, Kerala
6. Indian Institute of Technology, New Delhi, Delhi

7. Indian Institute of Technology, Kharagpur, West Bengal
8. Indian Institute of Technology, Roorkee, Uttarakhand
9. Xavier Labour Relations Institute (XLRI), Jamshedpur, Jharkhand
10. Indian Institute of Management, Indore, Madhya Pradesh

#### University

1. Indian Institute of Science, Bangalore, Karnataka
2. Jawaharlal Nehru University, New Delhi, Delhi
3. Banaras Hindu University
4. Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, Karnataka
5. Jadavpur University, Kolkata, West Bengal
6. Anna University, Chennai, Tamil Nadu
7. University of Hyderabad, Hyderabad, Telangana
8. University of Delhi, Delhi
9. Amrita Vishwa Peetham, Coimbatore, Tamil Nadu
10. Savitribai Phule Pune University, Pune, Maharashtra

#### Colleges

1. Miranda House, Delhi, Delhi
2. Loyola College, District Chennai, Tamil Nadu
3. Shri Ram College of Commerce, New Delhi, Delhi
4. Bishop Heber College, District Tiruchirapalli, Tamil Nadu
5. Atma Ram Sanatan Dharma College, New Delhi, Delhi
6. **St. Xavier's College, Kolkata, West Bengal**
7. Lady Shri Ram College for Women, New Delhi, Delhi
8. Dyal Singh College, Delhi, Delhi
9. Deen Dayal Upadhyay College, New Delhi, Delhi
10. **The Women's Christian College, Chennai, Tamil Nadu**

#### Pharmacy

1. Jamia Hamdard, New Delhi, Delhi
2. National Institute of Pharmaceutical Education and Research, Mohali, S.A.S. Nagar (Mohali), Punjab
3. University Institute of Pharmaceutical Sciences, Chandigarh, Chandigarh
4. Indian Institute of Chemical Technology, Mumbai, Maharashtra
5. National Institute of Pharmaceutical Education and Research, Hyderabad, Telangana
6. Birla Institute of Science, Pilani, Rajasthan
7. Manipal College of Pharmaceutical Science, Manipal, Karnataka
8. Poona College of Pharmacy Erandwane Pune, Maharashtra
9. S.R.M. Institute of Science and Technology, Chennai, Tamil Nadu
10. JSS College of Pharmacy, Mysore, Karnataka

#### ISRO embraces outsource satellite manufacture

The Indian space establishment is engaging for the first time a private sector industry to make a full multi-crore, heavy duty and full navigation satellite. Having been unable to keep pace with satellite fabrication, the ISRO has now roped in the private industry to bridge the gap.

#### What

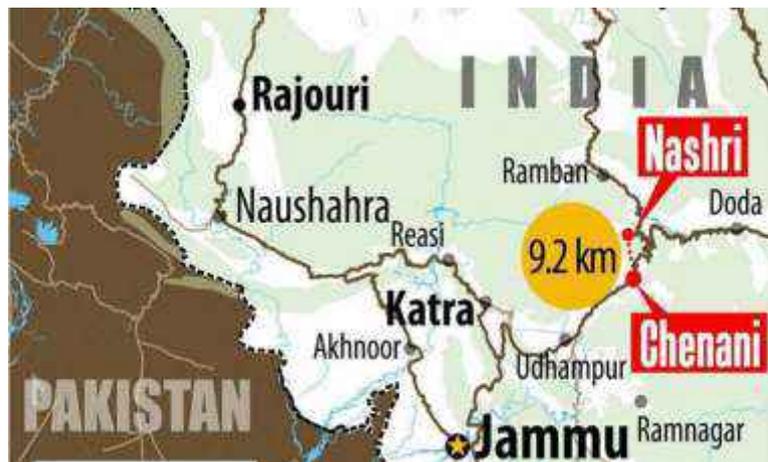
1. A consortium led by Alpha Design Technologies, Bengaluru is tasked to make two **full satellites for India's navigation system**.
2. After almost 150 missions and three decades of space faring, the ISRO is on a mission like never before.

3. It signed up with the Rs. 400-crore company to give India its first large private satellite.
4. India recently launched 104 satellites on a single mission, creating such a **global sensation that an intelligence officer from the U.S. expressed his “shock” at India’s singular achievement and this paved the way for India’s foray into the multi-billion dollar launch industry.**
5. Today for the first time a satellite is being fabricated in the private industry — a giant leap for the ISRO and a giant leap for the Indian space industry.

#### India's longest road tunnel inaugurated

Prime Minister Narendra Modi has inaugurated India's longest tunnel Chenani-Nashri, on the Jammu-Srinagar highway amid high security. The tunnel will reduce the travel time on National Highway

44 between Jammu and Srinagar by about 2 hours by shortening the distance between the cities by 31 km. Chenani-Nashri tunnel, will bypass three major stations - Kud, Patnitop and Batote - on the highway. The tunnel, built at the cost of Rs 2,500 crore in a record time of 5 and a half years by Infrastructure Leasing & Financial Services (IL&FS) Ltd, is located at an altitude of 1,200 metres (nearly 4,000



feet) in difficult Himalayan terrain. The tunnel is equipped with world-class security systems, and is expected to boost tourism and economic activities in the State of Jammu and Kashmir.

Key Features of the tunnel are:

1. It is a single-tube bi-directional tunnel, with a 9.35 metre carriageway, and a vertical clearance of 5 metres.
2. There is also a parallel escape tunnel, with "Cross Passages" connecting to the main tunnel at intervals of 300 metres.
3. It also has smart features such as an Integrated Traffic Control System; Surveillance, Ventilation and Broadcast Systems; Fire Fighting System; and SOS call-boxes at every 150 metres.

#### Formation of RDA approved

The union Cabinet initiated a major reform in the Railways by approving setting up of rail regulator called the Rail Development Authority (RDA). This comes as a major reform measure after the historic decision by the government to merge the railway budget with main budget last year. The functioning of RDA is likely to happen by August 1 this year.

What

1. The regulator will decide over tariff determination, ensuring fair play and level playing field for stakeholder investment in the railways, setting efficiency and performance standards and dissemination of information.
2. RDA will help the government to take appropriate decisions on important policy and operational issues including pricing of services commensurate with costs, suggest measures for enhancement of non-fare revenue, protection of consumer interests, promote competition, encourage market development, create positive environment for investment, promote efficient resource allocation, benchmarking of service standards, suggest measures for absorption of new technologies and human resource development and provide framework for non-discriminatory open access to the Dedicated Freight Corridor infrastructure.

3. The concept of a regulator was first mooted in railways way back in 2001 by an expert group under the chairmanship of Rakesh Mohan, which was later re-iterated by the National Transport Development Policy Committee (NTDPC) in 2014 and Bibek Debroy's Committee in 2015.
4. It was in 1924 that a separate railway budget was first presented after recommendation of a panel headed by British railway economist William Acworth in 1920-21.

#### Bill to reform transport sector passed

A bill to unleash radical reforms in the transport sector by ensuring 100% e-governance, checking bogus driving licenses and vehicle thefts, slapping heavy penalty on traffic violators and protecting the Good Samaritan was approved by the Lok Sabha.

#### What

1. **The bill seeks to “save lives” by ushering in radical reforms in the motor vehicles law to slap heavy penalty on traffic violators, protecting good samaritans and making vehicle-makers responsible for design defects to cut road accidents.**
2. **The basic aim of the Bill is “to save human lives”, as a whopping five lakh accidents take place every year claiming around 1.5 lakh lives across the country.**
3. Stressing that any kind of corruption would not be tolerated in the transport sector.
4. Observing that was corruption at the state check posts and the Centre was in touch with state to deal with the issue.
5. The bill seeks to make services like issuance of license totally transparent and online and provides for punitive action against officials in case of delay in issuing of the document to eligible applicants.
6. Under the new system, everyone will have to go to the license issuing authorities under a uniform procedure and if the license is not issued in three days, then the RTO will have to face action.

#### Bill to accord constitutional status to NCBC approved

A bill to accord constitutional status to the National Commission for Backward Classes was approved by the Lok Sabha.

#### What

1. The bill has similar provisions as in case of Scheduled Castes (SC) and Scheduled Tribes (ST) commissions, will not curtail the powers of states in any way.
2. As per objects and reasons of the bill, the commission will hear the grievances of socially and educationally backward classes, a function which has been discharged so far by the National Commission for Scheduled Castes.
3. It also seeks to insert a new Article 342A so as to provide that the President may, by public notification, specify the socially and educationally backward classes.
4. The power of state commissions would continue.
5. The House also repealed the National Commission for Backward Classes Act 1993 as the commission will now be **part of the Constitution**. **“We respect the rights of the states.**

#### CSS reduce from 66 to 28

The government has reduced the number of centrally sponsored schemes (CSS) to 28 umbrella schemes from 66. Based on the recommendation of the sub-group of Chief Ministers on rationalisation of centrally sponsored schemes, the government of India has rationalised centrally sponsored schemes (CSS) effective from the financial year 2016-17.

#### What

1. 6 schemes have been categorised as Core of the Core, 20 schemes as Core Schemes and remaining two as Optional Schemes.

2. The related schemes could be merged and implemented as "Umbrella Schemes" with flexibility to states to administer the admissible component in the line with state-specific requirements.

#### Parliament clears landmark HIV Bill

Parliament passed the Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) (Prevention and Control) Bill, 2017. The crucial public health legislation guarantees equal rights to people living with HIV and AIDS in treatment, admissions to educational institutions and jobs.

#### What

1. The Bill lists various grounds on which discrimination against HIV positive persons and those living with them is prohibited. Asserting that there would be no discrimination against persons **infected with HIV**, "**Whosoever does not adhere to the provisions of the Bill will be penalised**."
2. There would also be civil and criminal proceedings against them. Action would be also taken against those who come between the implementation of the provisions of the proposed Bill.
3. The law provides a broad legislative framework for the response to HIV in India and is the first national HIV law in South Asia.
4. The Bill also prohibits any individual from publishing information or advocating feelings of hatred against HIV positive persons and those living with them.
5. The government had spent ₹2,000 crore on ART alone and this was a 100% **centrally-sponsored scheme as the "government is committed to (treating every patient) and no one will be left out"**.

#### National Conference on Autism

Shri Thaawarchand Gehlot, Minister for Social Justice and Empowerment inaugurated a "National Conference on Autism" **organized by** The National Trust for the welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities under Ministry of Social Justice and Empowerment. A Memorandum of Understanding (MoU) was exchanged between The National Trust and Rotary Club in the field of Autism. Three publications of The National Trust were also released by Shri Thaawarchand Gehlot on the occasion.

#### What

1. The persons affected by Autism face challenges in many areas of their lives and thus educating the public about Autism Spectrum Disorders (ASD) and raising Autism awareness has been the focus of large scale initiatives in many countries.
2. The National Trust has launched 10 schemes in November, 2015 for the empowerment and welfare of the Divyangjans.
3. The Conference will provide an excellent opportunity to obtain information about latest developments in education / skilling and inclusive living of persons with autism, apart from deliberations on latest research on medical aspects. It will also be an excellent forum to meet various parents, experts and professionals to interact on the best practices.
4. **The "Rights of Persons With Disabilities (RPWD) Bill** passed by Parliament in December, 2016, the Disability has been defined based on an evolving and dynamic concept and the types of disabilities have been increased from existing 7 to 21.
5. Autism is a spectrum of complex neurological disorders that affect individuals in the areas of social interaction and communication. Several genes, in combination with environmental factors, may contribute to Autism.
6. **In India, 1 out of 89 children born are said to be living with Autism. It's symptoms** include: Poor eye contact, Decreased social response; responses to their name, looking people, social smiles, Repetitive behaviors, Lack of expected language and social development, Decreased nonverbal communication and gestures.

7. In 2007, the UN General Assembly declared 2nd April as World Autism Awareness Day (WAAD) and since 2008, 2nd April is being observed across the World as World Autism Awareness Day to increase awareness about Autism among general masses worldwide.

TU-142M receives at INS Dega

**Hon'ble Chief of Andhra Pradesh Shri Nara Chandrababu Naidu welcomed the TU-142M Long Range Maritime Patrol aircraft of the Indian Navy which landed at INS Dega for the last time. A special ceremony organised at INS Dega to formally welcome the aircraft at Visakhapatnam. On arrival of the TU, the Hon'ble CM interacted with the crew members and exchanged mementos.**

What

1. The TU-142M aircraft were given a befitting farewell on 29 March 2017 at INS Rajali, **India's premiere Naval Air Station in Arakkonam, Tamil Nadu.**
2. Over the years, the TU-142M has rendered yeoman service to the nation and has taken part in all major exercises and operations including Operation Cactus in Maldives, Op Vijay in 1998, Op Parakram in 2002 and Anti-piracy Operations.
3. The Squadron was awarded Unit Citation by the Chief of Naval Staff in the year 2002 for outstanding professionalism and momentous contribution to the Service and adjudged the Best Frontline Squadron on numerous occasions over the years.

Swachhagraha

The Prime Minister Shri Narendra Modi has inaugurated an exhibition titled "Swachhagraha – Bapu Ko Karyanjali – Ek Abhiyan, Ek Pradarshani" **in the national capital on 10 April 2017 to mark the 100 years of Mahatma Gandhi's first experiment of Satyagraha in Champaran.** He was also launched an 'Online Interactive Quiz' at the event which is being organized by the National Archives of India.

What

1. The Champaran Satyagraha was a historic mass movement which had a phenomenal impact and he urged the countrymen to become Swachhagrahis and create a Swachh Bharat.
2. There was an exhibition showcasing Champaran Satyagraha & it will connect essential principles of Satyagraha with Swachhagraha.
3. The exhibition was also showcasing the ground covered by the Swachh Bharat Mission in creating a mass movement towards a clean India.
4. A century ago, Indians became Satyagrahis and fought colonialism. Today, let us become Swachhagrahis & create a Swachh Bharat.
5. Champaran Satyagraha was a historic mass movement led by Bapu. Its impact was phenomenal.

First Ever Ranking of Ports on Sanitation Parameters

For the first time ever, the twelve major ports under the Ministry of Shipping have been ranked on sanitation parameters, based on the efforts undertaken by them to counter waste generating sources with respect to port operation, office area, township area and the response to incoming ships. The assessment methodology included official interview, direct observation by the designated team from Quality Council of India and **stakeholder's interaction. The exercise was undertaken during the 'Swachhta Pakhwada' observed from the 16th to 31st of March 2017.**

What

1. Quality Council of India (QCI) was tasked to assess the Swachhata activities undertaken by all the Ports. While Haldia and Vizag ports bagged the first and second ranks respectively, almost all ports have achieved the benchmark for cleanliness or are well above it.
2. **The 'Swachhta Pakhwada' was a major sanitation and cleanliness campaign launched by the Hon'ble Minister of Shipping, Sh. Nitin Gadakari on the 16th of March 2017 at the Shipping House in Mumbai, and observed by all the twelve**

major ports, five PSEs and seven attached offices/organizations of the Ministry of Shipping.

3. The 'Swachhta Pakhwada' not only emphasized cleanliness and sanitation but brought the focus on the setting up of 'Green Ports' for sustainable, environment friendly, long term development of ports.

India's first pharma firm makes profit

Bengal Chemicals & Pharmaceuticals Ltd, founded by the Father of Indian Chemistry Acharya Prafulla Chandra Ray, reported a net profit of Rs 4 crore in 2016-17, the first profit in six decades. The first pharmaceutical company established in India, which was running in profits till 1940s, posted a net loss of Rs 9.13 crore in 2015-16. It is however looking to clock a net profit Rs 10 crore in the current financial year.

What

1. This has resulted in a reduction in direct costs to 48 per cent of gross sales in 2016-17 from 76 per cent in 2013-14.
2. The company which has four manufacturing plants -- one each in Mumbai and Kanpur and two in Kolkata -- is set to commence commercial production of injectable products from May this year and planned to start tonic products soon.
3. The Bengal-based company with 320 employees has about Rs 215 crore of loans outstanding with accrued interest to central government.
4. The iconic pharmaceuticals company which was founded in 1901, was nationalised in 1981 and later sent to BIFR in 1992 following mounting losses.

Parliament's Budget Session ends

The parliament's budget session 2017-18 ended marking a few firsts including passage of key reform GST bill, advancing union budget to February 1 instead of February 28, merging the railway budget into the main document, merging plan and non-plan allocations and nod to the finance bill by March 31.

What

1. This is a big financial reform to make full funds available to ministries for execution of their developmental projects. This is the first time when Vote on Account was dispensed with during the Budget session.
2. During the entire Budget Session, 2017 the productivity of Lok Sabha was 113.27% and that of Rajya Sabha was 92.43%. Approximately 8 hours were lost in Lok Sabha and 18 hours in Rajya Sabha due to interruptions, which was made up by sitting late for approximately 19 hours and 7 hours respectively.
3. Total number of Bills passed by both Houses of Parliament was 18. A major highlight was the passing of four historic Bills namely, the Central Goods and Services Tax Bill, 2017, the Integrated Goods and Services Tax Bill, 2017, the Goods and Services Tax (Compensation to States) Bill, 2017 and the Union Territory Goods and Services Tax Bill 2017 by both Houses of Parliament to enable implementation of Goods and Services Tax across the country from July, 1 2017.

**BILLS PASSED BY BOTH HOUSES OF PARLIAMENT**

1. The Payment of Wages (Amendment) Bill, 2017
2. The Specified Bank Notes (Cessation of Liabilities) Bill, 2017
3. The Enemy Property (Amendment and Validation) Bill, 2017
4. The Maternity Benefit (Amendment) Bill, 2017
5. The Finance Bill, 2017
6. The Mental Health Care Bill, 2017
7. The Employee's Compensation (Amendment) Bill, 2017
8. The Taxation (Amendment) Bill, 2017

Aadhaar-based BHIM for merchants launched

The National Payments Corporation of India announced the launch of mobile application for Aadhaar-based payments through Bharat Interface for Money (BHIM) app for

merchants. The service was launched by Prime Minister Narendra Modi in Nagpur. The new service will allow customers to make purchases using their Aadhaar number linked with their bank account. **The transaction will require customer's fingerprint for authentication.**

What

1. This will directly cater to about 40 crore bank account customers spread across the country whose account is linked with Aadhaar.
2. It is a huge opportunity for enabling digital transactions as about 99 per cent of adult population is now aadhaar enabled.
3. Currently, over 30 banks are participating on BHIM Aadhaar and more member banks shall be on-board, NPCI said. BHIM Aadhaar would be applicable for retail merchants only and not for corporate merchants.
4. BHIM is a smart mobile phone based app based on Unified Payments Interface (UPI) that allows simple, easy and quick payment transactions using UPI.
5. The BHIM app was originally launched by Prime Minister Narendra Modi to increase cashless transactions.
6. BHIM is based on UPI, which is the Universal Payments Interface and thus linked **directly to a bank account. Your friend, relative or even a merchant who you're trying to pay doesn't necessarily need to be on the BHIM app. All they need is a bank account to receive the payment.**
7. BHIM also has options to transfer via IFSC, MMID as well for non-UPI banks. It also means the government has decided to go with one app that will enable digital payments via UPI.

Cashless township model

Prime Minister Narendra Modi launched a cashless/less cash township model in Nagpur on 14 April 2017. The model has been developed by fertilizer maker Gujarat Narmada Valley Fertilizers and Chemicals Ltd and has been replicated across 81 townships across the country, GNFC said in a statement. **GNFC's township at Bharuch in Gujarat became India's first complete cashless township post the demonetisation drive announced by the prime minister on 8 November.**

What

1. The townships across 12 states were facilitated to become cashless/less cash under the auspices of the National Institution for Transforming India (NITI) Aayog.
2. NITI Aayog advised all government of India ministries and CMDs of 300 plus **central PSUs to adopt GNFC's model and replicate it.**
3. The 81 townships include those of public sector companies such as Oil and Natural Gas Corp, Indian Oil Corp., NTPC, Border Security Force as well as private sector townships set up by companies such as Reliance Industries Ltd, Essar Oil Ltd, Adani Ports and SEZ, Aditya Birla group, and Welspun group.
4. The cashless/less cash townships are in states including Gujarat, Uttar Pradesh, Madhya Pradesh, Maharashtra, Bihar, Chhatisgarh and Delhi. They cover a population of around 2 lakh and collectively do about 250,000 transactions per day or almost 9 crore in a year.

### **India's first ideal digital village**

Melghat, which literally translates into a confluence of hills, also has the unsavoury **distinction of being the malnutrition capital in India's richest state – Maharashtra.** But the arid forested region of Amravati district is determined to shake off the dubious tag, and has made it to a shortlist for a coveted national award on public services.

What

1. At the centre of the dramatic turnaround is Harisal village, which was adopted by Microsoft to **be developed as India's first ideal digital village.** Underpinned by public health initiatives of the state government, the village is now in the **reckoning for the Prime Minister's Award for excellence in Public Administration,** and may provide a replicable public-service delivery model for the whole state.

2. Two key initiatives began turning the wheel, Maharashtra government decided that the piecemeal approach of just increasing access to fair-price shops was not going to solve the problem.
3. The government sought a comprehensive view of the population in the region to find a solution to the seemingly endemic health problem.
4. **Microsoft has used its 'white space' technology**, the unused spectrum between two TV channels, to provide free internet connectivity to Harisal and neighbouring villages.
5. The service has been provided for free and Microsoft has also deputed its officials who are engaging with the Maharashtra government to find different technological solutions for Harisal.

27<sup>th</sup> state to join UDAY

Mizoram has become the 27th state to join UDAY scheme meant for revival of debt-stressed discoms which will help it get overall benefits of Rs 198 crore during the period of turnaround. The Government of India and the State of Mizoram signed a Memorandum of Understanding (MoU) under the scheme Ujwal DISCOM Assurance Yojana (UDAY) on March 31, 2017 for operational improvement of the state's Power Distribution Department.

## International

Youngest-ever UN Messenger of Peace

Nobel Peace Prize winner Malala Yousafzai is set to become the UN's youngest-ever Messenger of Peace after she was selected by Secretary-General Antonio Guterres for the highest honour bestowed by the world body on a global citizen. The designation ceremony will be held next week at the UN's headquarters.

What

1. Her courageous activism for girls' education has already energised so many people around the world as the United Nations's youngest-ever Messenger of Peace, she can do even more to help create a more just and peaceful world.
2. Yousafzai, 19, became a global symbol of the fight for girls education after being shot in the head in October 2012 for opposing Taliban restrictions on female education.
3. The Pakistani education activist survived the attack and became an advocate for millions of girls denied formal education around the world.
4. In 2013, Yousafzai and her father Ziauddin Yousafzai co-founded the Malala Fund to bring awareness to the social and economic impact of girls education, and to empower girls to demand change.
5. She became the youngest-ever Nobel Peace Prize laureate in December 2014, sharing the honour with Indian children's rights and education advocate Kailash Satyarthi.
6. Yousafzai is the first Messenger of Peace designated by Guterres.
7. UN Messengers of Peace are widely recognised public figures, who help to raise worldwide awareness of the Organisation's ideals and activities.
8. Through their public appearances, contacts with the international media and humanitarian work, they expand public understanding of how the United Nations helps to improve the lives of people everywhere.

India, Russia sign pact in innovation ecosystem

India and Russia signed a joint declaration to stimulate cooperation in the field of promoting innovation ecosystem between the two countries. The declaration was signed between the Department of Science and Technology and Ministry of Economic Development of the Russian Federation on the sidelines of the Global R&D Summit 2017 in Bengaluru.

#### What

1. The Federation of Indian Chamber of Commerce and Industry (Ficci) which organised the Summit along with the Department of Science and Technology stated this in a release.
2. India and Russia are natural partners on innovation, Secretary, Department of Science and Technology, Ashutosh Sharma, **“with increased people to people contact we will take the relations to new heights through this joint declaration.”**
3. As per the declaration, the two countries will strive to deepen cooperation to promote innovation and technology entrepreneurship through promotion of development of long-term cooperation, co-innovation and direct contacts between Russian and Indian Innovation clusters and also business associations, techno-parks, business-incubators, high-tech companies, start-up enterprises, educational and research institutions.
4. The National Science and Technology Entrepreneurship Development Board of Department of Science and Technology, Government of India, will be responsible for implementation of the joint declaration from the Indian side.
5. The two sides also agreed to implement joint projects in the field of innovation and exchange of information, as well as best practices in the innovation space.

#### India gives largest soft loan

India pledged a soft loan of nearly Rs 32,000 crore for Bangladesh, as the two nations inked 22 pacts for cooperation in diverse areas, including defence, cyber security, nuclear energy and space technology. This is the single-largest soft loan New Delhi has pledged **to any country at one go. Prime Minister Narendra Modi announced India’s new line of credit** of \$4.5 billion (Rs 28,921 crore) for development projects in Bangladesh after a meeting with his counterpart from the neighbouring country, Sheikh Hasina, who is currently on a four-day-visit to New Delhi.

#### What

1. This (line of credit) brings our resource allocation for Bangladesh to more than \$8 billion over the past six years, the implementation of the defence credit **line would be “guided by the needs and priorities of Bangladesh.”**
2. The neighbours inked a Memorandum of Understanding (MoU) to lay the framework for bilateral defence cooperation. Two other MoUs were inked for cooperation between the National Defence College, New Delhi, and the Defence Services Staff College at Wellington in Tamil Nadu with counterpart institutions in Dhaka and Mirpur in Bangladesh on national security, development, strategic and operational studies.
3. The Indian Space Research Organisation and Bangladesh Telecom Regulatory Commission signed an MoU for cooperation in peaceful uses of outer space. This will pave the way for India to offer its space technology to Bangladesh.
4. The two countries inked an agreement for cooperation in peaceful uses of nuclear energy, along with the inter-agency arrangement for Exchange of Technical Information and Co-operation in the Regulation of Nuclear Safety and Radiation Protection.

#### 7<sup>th</sup> member of SASEC

Myanmar became the 7th member of South Asia Sub-regional Economic Cooperation (SASEC) program of Asian Development Bank (ADB) and was officially made member at the **SASEC Finance Ministers’ meeting held in New Delhi and chaired by Union Finance Minister Arun Jaitley.**

#### What

1. **Myanmar’s membership in SASEC will offer host of opportunities for realizing synergies from economic cooperation in the subregion.**
2. Road corridors in Myanmar can provide key gateway between South Asia and Southeast Asia, while its ports can provide alternate routes and gateways to the landlocked northeastern region of India.

3. It has the potential to unleash significant economic potential and bring better livelihoods to millions in the region after developing multimodal connectivity **between India's northeastern region, Bangladesh, and Myanmar.**

#### About SASEC

1. SASEC program is a project-based partnership to promote regional prosperity by improving cross-border connectivity, boosting trade among member countries and strengthening regional economic cooperation.
2. It was established in 2001 in response to the request of the four countries of South Asia – Bangladesh, Bhutan, India and Nepal – from ADB to assist in facilitating economic cooperation among them.
3. ADB is the secretariat and lead financier of the SASEC program.
4. So far, it has supported 46 projects worth \$9.17 billion in transport, trade facilitation, energy and information and communications technology (ICT).
5. Its seven members are Bangladesh, Bhutan, India, Maldives, Myanmar, Nepal and Sri Lanka.

#### India, Bangladesh sign 22 pacts

India and Bangladesh on 8 April 2017 signed 22 agreements in the fields of defence cooperation, civil nuclear energy, space and cyber security among others, following bilateral talks between Prime Minister Narendra Modi and his Bangladeshi counterpart Sheikh Hasina.

#### What

1. India and Bangladesh signed a Memorandum of Understanding (MoU) through which India would extend a line of credit of \$500 million to support Bangladesh's defence-related procurements.
2. Three more MoUs were signed to enhance defence cooperation between the two countries.
3. To enhance cooperation in national security and strategic and operational studies, two MoUs were signed, one between the Defence Services Staff College (India) and the Defence Services Command and Staff College (Bangladesh) and another between the National Defence College, Bangladesh and the National Defence College, New Delhi.
4. Two agreements were signed on cooperation in the peaceful use of nuclear energy and cooperation in the regulation of nuclear safety.
5. An inter agency agreement was signed between the Global Centre for Nuclear Energy Partnership (GCNEP) of India and the Bangladesh Atomic Energy Commission (BAEC) pertaining to nuclear power plant projects in Bangladesh.
6. An MoU was signed to cooperate in the area of Cyber Security through Indian Computer Emergency Response Team (CERT-In) and Bangladesh Government Computer Incident Response Team (BGD e-Gov CIRT).
7. India and Bangladesh also signed a financing agreement for the construction of 36 community clinics in Bangladesh.
8. An MoU was signed for establishing Border Haats along the India-Bangladesh border.
9. Two MoUs were signed for cooperation in judicial training and capacity building.
10. An MoU was signed for the development of fairway from Sirajganj to Daikhowa and Ashuganj to Zakiganj on the Indo-Bangladesh Protocol Route.
11. Another MoU was signed on Passenger and Cruise Services on the Coastal and Protocol Route between the two neighbours.
12. The two sides signed agreements for cooperation in earth sciences, space, mass media, information technology and the peaceful use of outer space.

### China delivers third maritime patrol ship to Pakistan

China has handed over to Pakistan a 600-tonne patrol ship, the third of its kind, to **safeguard the country's maritime interests at a time when both nations are pushing forward** with the CPEC project. The ship which was handed over to **Pakistan's maritime safety** authority in Guangzhou, Guangdong province is the third of its kind, was built by China Shipbuilding Trading Company Ltd (CSTC) and China State Shipbuilding Corporation (CSSC) Xijiang Shipbuilding Co Ltd.

What

1. Previous two ships have already demonstrated their reliability and excellent performance during visits and exchanges, joint drills, maritime rescue and other missions in Pakistan.
2. **Pakistan's maritime safety authority** expressed great appreciation for the quality of the ships and for sound cooperation with Chinese ship manufactures, who have promised to provide after-sale services.
3. The ships are key to consolidating close relations between China-Pakistan, protecting **Pakistan's sea transportation and pushing forward the China-Pakistan Economic Corridor (CPEC) and Belt and Road Initiative.**
4. The **CPEC project will link the Pakistani city of Gwadar to China's Xinjiang** via a vast network of highways and railways.
5. The project was launched in 2015 with USD 46 billion but later the investment increased to USD 55 billion.

### China launches 1<sup>st</sup> high-throughput communications satellite

China successfully launched a new communication satellite which will enable passengers of high-speed trains to watch high-definition videos smoothly and help those at the scene of natural disasters. Shijian-13, China's first high-throughput communications satellite, was launched from Xichang Satellite Launch Center in China's southwestern Sichuan Province.

What

1. The satellite, with a transfer capacity of 20 Gbps and a designed orbital life of 15 years, was sent into orbit on a Long March-3B carrier rocket, state-run Xinhua news agency reported.
2. The satellite, which has a higher message capacity than the combined capacity of all of China's previous communications satellites, is capable of providing better Internet access on planes and high-speed trains, as well as in less-developed regions.
3. The satellite will undergo tests on its broadband multimedia satellite communications system and the high-speed laser communication technology between the ground and the satellite.
4. Different from previous satellites fuelled by chemicals, Shijian-13 is the first Chinese satellite to be powered by electricity.
5. Using electricity as propellant could potentially improve efficiency by as much as 10 times compared with those that use chemicals as a propellant.
6. For the first time, a large number of domestic components have been used on the communications satellite.
7. It is also the first time a laser communications system has been installed on a Chinese high orbit satellite with a long lifespan.

## Economy

### Finance Bill takes effect

President Pranab Mukherjee has given his assent to the Finance Bill 2017 to give effect to provisions like bar on cash transactions above Rs 2 lakh and compulsory quoting of Aadhaar for filing tax returns.

### What

1. This is the first-time ever the annual Budget together with taxation proposals have come into effect from the first day of the financial year.
2. Scrapping a colonial-era tradition of presenting the Budget at the end of February, Finance Minister Arun Jaitley had for the first time in the history of independent India presented the annual accounts on February 1.
3. The legislative process of getting approvals for demands for grants or spending, general Budget as well as taxation proposals contained in the Finance Bill 2017 were all completed by March 30. President's assent was taken the very next day.
4. This will give the government more time to implement welfare spending programmes and taxation plans.
5. Previously, when the Budget was presented at the end of February, the three-stage Parliament approval process used to get completed some time in mid-May, weeks ahead of onset of monsoon rains. This meant government departments would start spending only from August-end or September after the monsoon ends.
6. Besides advancing the presentation date, the Budget scrapped the Plan and non-Plan distinction and merged the Railway budget with it, ending a nearly century-long practice.
7. Advancement of the Budget will give government departments more leeway to spend as well as allow companies time to adapt to business and taxation plans.
8. Among the most important is limiting cash transaction to Rs 2 lakh, at par with the current requirement of quoting permanent account number (PAN) for cash spending.
9. The Finance Bill also provides that a person holding PAN as on July 1, 2017, has to intimate his Aadhaar number to the authorities in a manner which will be notified by the government.
10. It also amends the Companies Act of 2013 to make donations by companies to electoral trusts only through account payee cheque, bank draft or electronic transfer.
11. The language has also been tweaked to provide for every company disclosing in its profit and loss account the total amount contributed to such trusts.
12. The President's assent to the Finance Bill also means that as many as seven appellate tribunals will now be dissolved and their work taken over by other existing ones.
13. The tribunals scrapped include the Competition Appellate Tribunal, whose functions will be taken by the National Company Law Appellate Tribunal (NCLAT).
14. The Airports Economic Regulatory Authority Appellate Tribunal and the Cyber Appellate Tribunal will be replaced and their functions would be taken over by the Telecom Disputes Settlement and Appellate Tribunal (TDSAT).
15. The Copyright Board will be dissolved and its functions will go to the Intellectual Property Appellate Board.
16. The National Highways Tribunal will be replaced and its functions will be taken over by the Airport Appellate Tribunal while the job of the Employees Provident Fund Appellate Tribunal will be handled by the Industrial Tribunal.

### Employees Compensation Bill passed

Employees suffering injury in industrial accident will now get compensation of up to Rs1 lakh, with Parliament clearing a bill in this regard. The Employees Compensation (Amendment) bill 2016 also has a provision for hefty penalty in case of any violation by the employers.

### What

1. The bill was passed by the Lok Sabha last August but it was brought before the Lower House as Rajya Sabha had passed it last month with two minor amendments.

2. The new legislation provides for payment of compensation from Rs50,000 to Rs1 lakh to employees and their dependents in the event of injury by industrial accidents, including occupational diseases.
3. The legislation also has a provision for a hefty penalty in case of an violation by an **employer which could prove to be a “deterrent” to the employees.**
4. It covers workers in the organised sector and the government had said it was trying to bring more workers from the informal side to the organised sector.

#### Asia Pacific Business Complexities Survey 2017

India is likely to become significantly more influential in Asia-Pacific in next five years and the number of cross-border transactions involving Indian companies is also set to increase, says a report. According to a new report by global law firm Baker McKenzie and Merger market, 90 per cent of 150 Asia Pacific based business leaders expect the number of cross-border M&A transactions involving Indian companies to rise.

#### What

1. Amidst global uncertainty, Asia-Pacific will play an increasingly significant role to fuel both international trade and investments. This, combined with the Government of India's progressive outlook, is accelerating India's favourable position to do business in and with, as well as strengthening the country's influence in the region.
2. The report, Asia Pacific Business Complexities Survey 2017, further noted that technology, through either disruption or the need for innovation, is the leading complexity with companies across the region, followed by cost pressures/shrinking margins and technological disruption from competitors.
3. This, combined with the Government of India's progressive outlook, is accelerating India's favourable position to do business in and with, as well as strengthening the country's influence in the region.
4. Around 95 per cent of respondents said Indian economic influence in the region would grow in the coming five years, compared to 77 per cent who saw China's influence as continuing to expand.

#### First ever foreign buyer bids for SME IPO

A foreign investor has participated in the public issue of a small and medium enterprise (SME) for the first time since the segment was introduced five years ago on the BSE and the NSE. The initial public offer (IPO) of Bohra Industries saw a bid from a foreign institutional investor (FII) amounting to almost 35% of the issue size.

#### What

1. The Udaipur-based company, which was incorporated in 1996, entered the capital market to raise ₹25 crore but the issue was subscribed more than three times with bids amounting to ₹80 crore coming in.
2. Recently completed IPOs have received over-whelming response in both primary and secondary **markets, which is quite encouraging,” said Mahavir Lunawat,** group managing director, Pantomath Advisory Service Group, the investment banker for the IPO.
3. The past has proved that SME companies give good return on investment. This is one of the major reasons behind increasing participation of investors.
4. Apart from a bid from an FII, the issue witnessed strong participation from both retail and non-retail investors, including corporates and high net worth individuals (HNIs).
5. The FII is believed to be an India-focussed fund of an overseas investor registered with the Securities and Exchange Board of India (SEBI).
6. The BSE and the National Stock Exchange (NSE) unveiled separate SME platforms in 2012. While BSE has more than 170 companies listed on its SME segment, NSE has almost 50 entities on board so far.

### Limits on corporate funds to political parties removed

The government said the limit on maximum amount that a corporate could contribute to a political party had been removed. Donations to political parties by firms are governed by provisions in the Companies Act.

#### What

1. Section 154 of the Finance Act, 2017, amends section 182 of the Companies Act 2013.
2. Section 182 of the Companies Act relates to contributions to political parties by firms.
3. There was no proposal to review the law on foreign contributions to political parties under the Foreign Contribution Regulation Act (FCRA).
4. FCRA prohibits political parties from accepting foreign contributions from any foreign sources, including companies.

### Business Reform Action Plan 2017

The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, in partnership with the World Bank Group, released the Business Reform Action Plan (BRAP) 2017 for implementation by States/UTs on 13.04.2017. The BRAP includes 405 recommendations for reforms on regulatory processes, policies, practices and procedures spread across 12 reform areas, that is, labour regulation enablers; contract enforcement; registering property; inspection reform enablers; single window system; land availability and allotment; construction permit enablers; environmental registration enablers; obtaining utility permits; paying taxes; access to information and transparency enablers and sector specific reforms spanning the lifecycle of a typical business.

#### What

1. This year there are 103 new set of reforms (out of 405) focusing on central inspection system, online land allotment system, online single window system for granting construction permits, registration under Inter State Migrant Workmen (RE&CS) Act, 1979, approval for boiler manufacturer and boiler erector etc.
2. BRAP 2017 also includes two new sectors i.e. Healthcare and Hospitality. The last date to implement the reform is 31.10.2017.
3. DIPP will carry out a comprehensive business-to-government (B2G) feedback exercise this year whereby feedback will be taken from businesses on the quality of implementation of the reforms claimed by the States and UTs.
4. For each State/UT, the scores will be aggregated over all the surveys conducted to yield an overall score for the State/UT.
5. The feedback scores will be used to generate a ranking of States/UTs in terms of **reform implementation. Such a ranking will be different from the last year's ranking, which was a ranking of de jure reforms (or reforms based on evidence submitted by States).**
6. The online portal shall soon be enabled to allow States/UTs to upload the reforms implemented along with the evidence.

### Prompt Corrective Action framework

The Reserve Bank of India (RBI) tweaked rules that trigger regulatory action against lenders who overshoot the limit on bad loans or fail to comply with capital ratios. The changes are under the so-called Prompt Corrective Action framework unveiled in 2002, which sets thresholds that when breached trigger supervisory action from the RBI, including a restriction on dividend distribution.

#### What

1. In extreme cases, the framework provides the RBI with powers to force mergers or even wind up the non-compliant lender.
2. Regulatory action will be taken if a bank's capital-to-risk-assets ratio falls below 7.75 per cent, RBI said in a statement on Thursday.

3. If the ratio falls below 3.625 per cent, the bank could be a candidate for a merger or may even be wound up, the regulator added.
4. It was not immediately possible to draw a direct comparison between the new limits and the existing ones.
5. Meanwhile, on bad loan ratios, the central bank said the first threshold will be triggered if a bank's net non-performing assets ratio crosses 6 per cent.
6. A net bad loan ratio of more than 12 per cent will invite the extreme action of winding up or merger.

## Science and Technology

### BS-IV fuel launched

India on day made a formal launch of BS-IV grade fuel across the country to keep carbon emission in check and set a target of ushering in BS-VI fuel by April 2020. The launch came days after the Supreme Court banned sale and registration of BS-III vehicles from April 1.

#### What

1. Union Petroleum Minister Dharmendra Pradhan formally launched the BS-IV grade transportation fuel on the occasion of Utkal Diwas.
2. Pradhan symbolically commenced sale of the eco-friendly and low-emission fuel from 12 different locations across the country through live video links. The cities are Varanasi, Vijayawada, Durgapur, Gorakhpur, Imphal, Bhopal, Ranchi, Madurai, Nagpur, Patna, Guwahati and Shillong.
3. Migration to BS-IV fuels shows India's resolve to cut down emissions. The next step is to usher in BS-VI fuels by April 1, 2020, to be at par with global standards.
4. The petroleum ministry is pursuing various other forms of energy like liquefied natural gas (LNG) for industries and the transport sector, compressed natural gas (CNG) and autoLPG for automobiles and piped natural gas (PNG) for households, besides ethanol and bio-mass, to expand the existing energy basket.
5. The "resounding success" of initiatives like **Pahal, GiveItUp and the ongoing PMUY** scheme are proof of the effectiveness of these socio-economic welfare schemes, which go a long way in ensuring energy inclusion of the poor.

### First ever bio-gas bus

A city based company has claimed to have launched the first bio-gas fuelled bus in Kolkata keeping a flat fare of just Re 1. This is the first one to launch bio-gas bus in the entire south East Asia. Now old buses which have run for 15 or 20 years can also be given a fresh lease of life with this clean and cheap fuel and we are in the process of seeking government approval for the same," Phoenix India Research chairman and managing director said.

#### What

1. The first bus will run a distance of 17 km between Ultadanga and Garia in the southern fringes of the city and Phoenix India will run the bio-gas service from its Corporate Social Responsibility fund.
2. In Delhi, CNG buses cannot go on long-haul due to fuel tank constraints. We have able to overcome that hurdle. The bio-gas bus can run up to 6 km on one kg.
3. The company said they are an approved bio-gas company by the Petroleum and Explosives Safety Organisation (PESO), having plants at Gujarat and West Bengal.

### New tree-living crab species found

Scientists have discovered a new species of long legged, tree-dwelling crabs in Western Ghats of Kerala. The new species named Kani maranjandu after the Kani tribe in Kerala are substantially different from other congeners. The characteristic traits of the crab include the structure of its hard upper shell, its male abdominal structure and reproductive parts and diagnostic elongated walking legs, which no other genus has, said researchers from University of Kerala.

### What

1. This is the first report of its kind to offer a record of an arboreal crab — a species that lives in trees.
2. The survey of the freshwater crab fauna started in 2014 in the Western Ghats in Kerala. **People from the Kani tribe reported sightings of a 'long legged' tree crabs** in the area.
3. After a year, researchers were finally able to capture a female specimen and later a large adult male.
4. As water holding hollows in large trees are essential for the survival of this unique species, the discovery also stress the need for conservation of large trees in the degraded forest ecosystems of the Western Ghats.
5. It also highlights how little we know about the actual biodiversity that resides in these forests and the efforts that must still be made to find and study the many undoubted new species that still live there.

### SREP robot developed

Scientists at CSIR-National Institute of Oceanography (NIO) have developed a robotic platform, Seabed Resident Event Profiler (SREP) that is capable of being stationed at any water depth from 0-200 metres to track the oceanic processes. The robot has been designed to regularly record the water column information at every 10 to 25 cm during every profile four times a day.

### What

1. The robot was tested during the recent voyage of RV Sindhu Sadhana, the latest state of the art research vessel of NIO.
2. The SREP robot has been designed particularly to carry out studies related to the monsoon, global climate and upwelling.

### About CSIR-NIO

1. It was established on 1 January 1966 with its headquarters at Dona Paula, Goa.
2. It has regional centres at Kochi, Mumbai and Visakhapatnam. CSIR-NIO was established following the International Indian Ocean Expedition (IIOE) in the 1960s.
3. CSIR-NIO primarily focuses on research over traditional branches of oceanography such as biological, chemical, geological/geophysical, and physical as well as over ocean engineering, marine instrumentation and marine archaeology.

### In a first, atmosphere found around Earth-like planet

Astronomers have for the first time detected an atmosphere around an Earth-like planet just 39 light years away, a significant step towards the detection of life beyond our solar system. Scientists, including those from Max Planck Institute for Astronomy in Germany, studied the planet known as GJ 1132b, which is 1.4-times the size of our planet. They imaged the planet's host star, GJ 1132, and measured the slight decrease in brightness as the planet and its atmosphere absorbed some of the starlight while passing directly in front of their host star.

### What

1. The detection of an atmosphere around the super-Earth GJ 1132b marks the first time an atmosphere has been detected around a planet with a mass and radius close to Earth's mass and radius (1.6 Earth masses, 1.4 Earth radii).
2. With the present observation, we have taken the first tentative steps into analysing the atmosphere of smaller, lower-mass planets that are much more Earth-like in size and mass.
3. GJ 1132b orbits the red dwarf star GJ 1132 in the southern constellation Vela, at a distance of 39 light-years from us.
4. The team used the GROND imager at the 2.2-m ESO/MPG telescope of the European Southern Observatory in Chile to observe the planet simultaneously in seven different wavelength bands.

5. GJ 1132b is a transiting planet: From the perspective of an observer on Earth, it passes directly in front of its star every 1.6 days, blocking some of the star's light.
6. The size of stars like GJ 1132 is well known from stellar models. From the fraction of starlight blocked by the planet, astronomers can deduce the planet's size - in this case around 1.4 times the size of the Earth.
7. GJ 1132b provides a hopeful counterexample of an atmosphere that has endured for billions of years. Given the great number of M dwarf stars, such atmospheres could mean that the preconditions for life are quite common in the universe.

Belle-II detector system

The High Energy Accelerator Research Organisation (KEK) completed the 'rolling-in' of the Belle-II experiment in Tsukuba, Japan. With this, it moves a step forward by integrating particle detector with powerful accelerator. The term roll-in refers to the operation of moving the entire Belle II detector system from its assembly area to the beam collision point. The Belle II detector's total weight is about 1400 tons.

What

1. Belle II experiment consists of an upgraded detector to record the enormous numbers of particle processes that are produced by the SuperKEKB accelerator.
2. The experiment is designed to study violations of the Standard Model of particle physics.
3. It is grand collaboration of 700 scientists from 23 countries including India.
4. The detector precisely measures elementary particle interactions artificially created with the upgraded SuperKEKB accelerator.
5. The detector will provide measurements of direction and momenta of newly produced particles.

#### India's contribution

1. Belle-II has a significant Indian participation both on experimental and theoretical sides. The fourth layer of the six-layer i.e. highly sensitive particle detector (the heart of Belle-II) has been built by Indian scientists from Tata Institute of Fundamental Research (TIFR), Mumbai.
2. Scientists from the Indian Institutes of Technology (IIT) Bhubaneswar, Chennai, Guwahati and Hyderabad, Panjab University, Institute of Mathematical Sciences (Chennai), Punjab Agricultural University, Malaviya National Institute of Technology (Jaipur), Indian Institute of Science Education and Research (Mohali) are also participating in this research.

CPS programme launched

Department of Science and Technology (DST) has launched Cyber Physical Systems (CPS) programme dealing with self-driven cars, autonomous unmanned vehicles and aircraft navigation systems. The programme is still at a nascent stage. Rs. 3,000-crore has been conceived for it and it will first take root in some of the Indian Institutes of Technology (IITs).

What

1. CPS is an interdisciplinary field that deals with the deployment of computer-based systems that do things in the physical world. For example, self-driven cars produced by Google and Tesla.
2. It is a mechanism controlled or monitored by computer-based algorithms, tightly integrated with the internet and its users.
3. It involves transdisciplinary approaches, merging theory of cybernetics, design and process science and mechatronics.
4. **It can be turned into a huge opportunity by ensuring that India's future workforce is skilled in robotics, artificial intelligence, digital manufacturing, big data analysis, quantum communication and IoTs.**

5. The National Science Foundation of the United States already has identified CPS as a key area of inter-disciplinary research back in 2003.
6. It means that India is late entrant in this technology which has huge potential.

#### Neptune-sized 'lost' planet discovered

Astronomers have discovered a **'lost' planet about the size of Neptune** tucked away in a solar system 3,000 light years from Earth. The new planet, Kepler-150 f, was overlooked for several years, according to researchers at the Yale University in the US. Computer **algorithms identify most such "exoplanets", which are planets located outside our solar system.**

What

1. The algorithms search through data from space mission surveys, looking for the telltale transits of planets orbiting in front of distant stars.
2. In this case, it was a planet in the Kepler-150 system with a long orbit around its sun.
3. A follow-up visual search revealed the existence of a the new Neptune-sized exoplanet Kepler-150 f.
4. It was discovered using a combination of the planet multiplicity argument, an FP (false positive) probability analysis, and a transition duration analysis.
5. Kepler-150 f takes 637 days to circle its sun, one of the longest orbits for any known system with five or more planets.
6. The Kepler Mission found four other planets in the Kepler-150 system – Kepler-150 b, c, d, and e – several years ago. All of them have orbits much closer to their sun than the new planet does.

## Miscellaneous

### Uttar Pradesh signs "Power for All" agreement

The Uttar Pradesh government has signed "Power for All" pact with the Centre to provide 24x7 power supply to all the households in the State. With this signing of the agreement, Uttar Pradesh which was the only state in the country which did not join the central government scheme has finally joined in it.

What

1. 'Power for All scheme' is a joint initiative of the central and state governments, with the objective of providing 24X7 electricity to all households, industry, commercial businesses and other electricity-consuming entities within the time span of four years.
2. The government strives to provide 24x7 power across the country by 2019.

### EMEIA Fraud Survey 2017

India ranks ninth among 41 countries in bribery and corrupt practices in businesses, according to the findings of a recent survey. Nearly 78 per cent respondents queried in the country said that bribery and corrupt practices happen widely in businesses, as per the EY Europe, Middle East, India and Africa (EMEIA) Fraud Survey 2017. India ranks behind Ukraine, Cyprus, Greece, Slovenia, Croatia, Kenya, South Africa and Hungary, in the perception survey.

What

1. The ranking has improved marginally from the survey findings in 2015 when India was at the sixth position, owing to better regulatory scrutiny and emphasis on transparency and governance.
2. The perception of fraud and corruption in corporate India has seen a marginal but positive shift, led by amplified regulatory scrutiny and emphasis on transparency and governance.
3. However, unethical behaviour at the workplace among Gen Y (generally referred to people born in the 1980s-90s) has become a serious cause of concern.

4. The report said that uncertainties in the business environment, augmenting pressure to meet financial targets and aspirations to achieve unprecedented career growth are driving employees to justify unethical workplace behaviour.
5. Nearly 41 per cent of Indian respondents would be prepared to act unethically to enhance their own career, the findings revealed.
6. Globally, 1 in 5 respondents said they would be prepared to act unethically for their careers.

#### First title in Challenger tournament

Leander Paes won his first title of the season, combining with Canadian Adil Shamasdin to lift **the Leon Challenger Tour tennis tournament's men's doubles trophy** after a straight-set triumph.

What

1. **Paes, who was named a reserve in India's Davis Cup team for the Uzbekistan tie**, and Shamasdin defeated Luca Margaroli (Switzerland) and Caro Zampieri (Brazil) 6-1 6-4 in the title clash at the USD 75,000 hard court event.
2. With this win, Paes clinched his 20th ATP Challenger title. Paes has now won at least one title every year for the past 26 years.
3. **This was Paes' first final this season**. He had earlier reached the semi-finals of Dubai Championships and Delray Beach Open.
4. The last title Paes won on the ATP World Tour was in 2015 when he triumphed at Auckland with South African Raven Klaasen.

#### Tamil Nadu wins Deodhar Trophy

Tamil Nadu won the Deodhar Trophy by defeating Parthiv Patel-led India 'B' by 42 runs in the match held at Vizag. With this win, Tamil Nadu became the first state side to win the three-team one-day tournament. It makes Tamil Nadu first to win all major domestic crowns such as Ranji Trophy, Vijay Hazare, Irani and Syed Mushtaq Ali Trophy. The Deodhar Trophy is a List A cricket competition in Indian domestic cricket. It is named after Prof. D. B. Deodhar (known as the Grand Old Man of Indian cricket). It is a 50-over knockout competition played on an annual basis among the 5 zonal teams – North Zone, South Zone, East Zone, West Zone and Central Zone.

#### India ranks 3rd in world doping chart

India has been ranked third for the third year in a row in a doping violation report published by the World Anti-Doping Agency (WADA) for 2015, with 117 athletes from the country being punished after testing positive for banned substances. India followed the Russian Federation (176) and Italy (129) in the chart, the same position as in the reports of 2013 and 2014. All the violations by the Indians came from urine samples.

What

1. This is the first set of Anti-Doping Rule Violation statistics under the revised WADA Code and third such report in its history since 2013.
2. The worrying sign for India is that the number of dope offenders has been increasing in the last three years. India had 91 and 96 Anti-doping Rule Violations (ADRVs) in 2013 and 2014 respectively.
3. An ADRV is a doping offence committed by an athlete or athlete support person, which results in certain consequences or sanctions. It is derived from adverse **analytical findings (AAFs), commonly known as 'positive' results**.
4. Of the 117 Indian offenders of 2015, two are non-analytical ADRVs, which refer to cases that do not involve the detection of a prohibited substance by a WADA-accredited laboratory but instances like failure to submit to a test, possession, use or trafficking of a prohibited substance by athletes and support personnel.
5. Out of the 115 analytical ADRVs, 78 are committed by male athletes, while 37 are by female.
6. Among individual sports, weightlifting has taken over athletics as the dirtiest with a whopping 56 Indian lifters (32 male and 24 female) punished for doping.

7. Athletics contributed the second highest number of dope offenders with 21 (14 male and 7 female), followed by boxing (8), wrestling (8), cycling (4), kabaddi (4), aquatics (3), powerlifting (3), judo (2), wushu (2), rowing, bodybuilding (1), hockey (1), football (1) and street and ball hockey (1).
8. **Among the NADOs, India's National Anti—Doping Agency recorded 109 ADRVs, the second highest behind Russia's (127).**
9. The NADA took 5162 samples during 2015, out of which 110 tested positive for banned substances - AAFs. But there was no sanction in one case.
10. The dope offenders belong to 80 sports/disciplines and 121 nationalities.
11. The 2015 ADRVs Report makes for particularly interesting reading in combination **with WADA's 2015 Testing Figures Report that was published last November.**

#### Indian-origin wins 'Businesswoman of Year' award

An Indian-origin educationist in the UK, who moved to Britain after her marriage with no English language skills, has been named the 'Asian Businesswoman of the Year' in an award ceremony in Birmingham. 65-year-old Dame Asha Khemka, Principal and CEO of West Nottinghamshire College, was honoured for her efforts in the field of education and skills at the Asian Business Awards ceremony. The event, which took place at the famous Edgbaston cricket ground in the city, also marked the launch of the 'Asian Rich List' for the Midlands to highlight the high net worth Asians in the region.

#### What

1. Born in Bihar's Sitamarhi district, Dame Khemka left school after passing her exams at the age of 13 and had close to no English language skills when she moved to the UK with her husband and kids at the age of 25.
2. In 2013, she was awarded a Dame Commander of the Order of the British Empire, one of Britain's highest civilian awards.
3. The mother-of-three was the first Indian-origin Dame since Maharani Lakshmi Devi Bai Sahiba of Dhar State in 1931.
4. This year's 'Asian Rich List' marked a significant hike in the fortunes of NRI industrialist Lord Swraj Paul's Caparo Holdings.

#### 64<sup>th</sup> National Film Awards

The 64th National Film Awards 2016 were announced by the Chairpersons of the juries on Feature Films, Non Feature Films, Best Writing on Cinema and Most Film Friendly State Award. The Feature Film Central panel was headed by Shri Priyadarshan, an eminent Film filmmaker popularly known for his Malayalam movie Kanchivaram. The Chairperson for Non – Feature Film Jury was Shri Raju Mishra while the Chairperson for Writing Jury was Ms. Bhawana Somaaya. The Most Film Friendly State award which was introduced as a new category was announced by Shri Radha Krishna Jagarlamudi, a popular Director in Telugu film industry. **The National Film Awards would be presented by Hon'ble President of India on May 3rd, 2017.**

#### What

1. The Jury Members of the 64th National Film Awards for Best Writing on Cinema submitted its report to the Minister of State for Information & Broadcasting, Col. Rathore.
2. Kasaav in Best Feature Film category and Fireflies in the Abyss in the Non-Feature Film Category.
3. Ms. Sonam Kapoor was awarded Special Mention Award in the Feature Films Category for her role in the movie Neerja.
4. Movies in the languages other than those specified in the VIII Schedule of the constitution in the feature Film categories were also awarded.
5. The award for the best Moran Film was given to Haanduk while best Tulu film was given to Madipu.
6. Best Film Critic award was given to G. Dhananjayan for his in depth analysis on a wide range of topics such as film genres, brands, new strategies in movie watching, taxation impact and ticket pricing.

7. The Feature category was given to Mohanlal for his mastery in dealing with characters of various shades with unparalleled acting brilliance.
8. The Non-**Feature category was given to 'The Cinema Travellers'**. This year a **new category 'Best on-location Sound Recordist' in the Non-Feature Film** section of the National Film Awards was also introduced.
9. The state of Uttar Pradesh was awarded the Most Film Friendly State award for implementing a unique film policy.
10. **The State's Film Policy included various measures to create a suitable** environment, which not only invited shooting of films on a large scale in the State but also promoted other activities related to various aspects of film production including financial incentives for filmmakers.
11. The state of Jharkhand was given Special Mention Award for their Film Policy which provided growth opportunities to the local filmmaking talent from within the State.

#### Sindhu lifts India Open badminton title

Olympic silver-medallist P.V. Sindhu defeated Carolina Marin in straight sets 21-19, 21-16 in 47 minutes at the India Open badminton championship in New Delhi. With this victory, she avenged her Olympic final defeat over the same opponent.

What

1. Sindhu toyed with her opponent and won the finale easily. The Spaniard could not withstand the firepower of P.V. Sindhu.
2. Taming Saina Nehwal, Sindhu battled to upset second seed Sung Ji Hyun 21-18, 14-21, 21-14 and set up a title clash with Spaniard Carolina Marin.
3. Carolina Marin easily defeated the fourth-seeded Akane Yamaguchi of Japan 21-16, 21-14 in the other semifinals.

#### Birth Anniversary of Dr. Bhimrao Ambedkar Celebrated

126th birth anniversary of Bharat Ratna Dr. B.R. Ambedkar was celebrated at the Parliament House complex. The celebrations were organized by Dr. Ambedkar Foundation, Ministry of Social Justice & Empowerment.

What

1. Dr. B R Ambedkar was born on 14 April 1891 at Mhow in Madhya Pradesh.
2. Ambedkar was elected as the Chairman of the Drafting Committee of the Constituent Assembly.
3. He is called as the father of the Indian Constitution.
4. Bahishkrit Hitakarini Sabha was the first organization formed by Dr. Ambedkar in 1924. Ambedkar was appointed as the first Law Minister of Independent India, but he resigned from the Cabinet on September 1951 due to differences with Nehru on the Hindu Code Bill.
5. Ambedkar got himself converted to Buddhism on October 14, 1956.
6. He died on December 6, 1956 at Delhi due to severe diabetic neurosis.
7. **Some of his famous books are: 'The Untouchable: Who are They and Why They Have Become Untouchables'; 'Buddha and His Dhamma'; 'The Rise and Fall of Hindu Women'; 'Emancipation of Untouchables', 'The Evolution of Provincial Finance in British India'; 'Pakistan or Partition of India', 'Thoughts on Linguistic States', etc.**

#### WEF's global travel & tourism ranking

India has jumped 12 places to 40th rank globally in travel and tourism competitiveness list by World Economic Forum. India is one of the countries that improved the most as it gained 12 places in Asia, but lagged behind its other Asian peers like Japan and China which were ranked way ahead at 4th and 13th place, respectively. Spain is ranked at the top in the list.

#### What

1. India continues to enrich its cultural resources, protecting more cultural sites and intangible expressions through UNESCO World Heritage lists, and via a greater digital presence.
2. Some of the factors that helped India climb up the ladder include international openness through strong policies such as implementing visa on arrival and e-visas, and improvements in the country's ground transport infrastructure which benefited the travel and tourism sector in the country.
3. India has seen continued growth in international arrivals over the past 15 years, reaching the 8 million mark in 2015, adding the country's vast cultural and natural resources, and its price competitiveness advantage also attracted international tourists.
4. In the global ranking Spain, France and Germany were ranked at the top three positions, making them the most tourism friendly economies.
5. Traditional strong travel and tourism destinations, including Japan (4th), the United Kingdom (5th), the United States (6th), Australia (7th), Italy (8th), Canada (9th) and Switzerland (10th), have also made it to the top 10.
6. These results are of significant importance as tourism helps economic growth and job creation - up to 1/10th of global GDP and jobs are tourism-related.
7. The report ranks 136 countries across 14 dimensions, revealing how well countries could deliver sustainable economic and societal benefits through their travel and tourism sector.

#### India among top 4 in death by smoking

Smoking causes more than one in 10 deaths worldwide (equivalent to 6.4 million deaths), with 50% of these occurring in just four countries - China, India, US, and Russia, according to the latest estimates from the Global Burden of Disease study published in 'The Lancet'.

#### What

1. India is also among the top 10 countries together accounting for almost two-thirds of the world's smokers (63.6%) in 2015.
2. The new estimates, based on smoking habits in 195 countries between 1990 and 2015, illustrate that smoking remains a leading risk factor for death and disability despite many countries applying tobacco policies resulting in reductions in smoking prevalence.
3. Government estimates show in India over 5,500 youth start tobacco use every day, whereas around 35% of adults consume tobacco in some form or other. Over 25% of females start tobacco use before the age of 15 in the country.

#### Operation Durga launched

Similar to that of **Uttar Pradesh's 'anti-romeo squad'**, the Haryana government has **launched 'Operation Durga' to ensure women safety in the state**. Under this operation, **teams formed by the Chief Minister's Flying Squad visited public places such as schools, colleges, bus stands and railway stations and caught persons indulging in crime activities against women like eve-teasing, stalking, harassment and other such activities**. Since women are hesitant in reporting incidents involving anti-social elements to the Police, the **campaign, 'Operation Durga' was launched so that flying squads patrol those areas where such anti-social elements committed crimes against women**.

#### India second-most preferred Asian market

India is the second-most preferred market (overweight) in the Asia (excluding Japan) region, an investor sentiment survey carried out by Credit Suisse shows. Chinese stocks listed in Hong Kong are the most-preferred, while those listed on the mainland are the third-most preferred, according to the survey. Meanwhile, Pakistan, Malaysia, and Australia were the least preferred markets (underweight).

#### What

1. The survey was conducted during Credit Suisse's 20th Asia investment conference held between March 27 and March 30.

- Participants choose Asia ex-Japan as the region that will provide the biggest upside for equity investors in 2017, followed by Europe and US. Investors saw US trade policies as the biggest risk to the markets, followed by geopolitical risks.
- More than half of those polled said the Asia Pacific index will go up more than 10 per cent in 2017, while a third expect the index to remain flat.
- Overall, the investor sentiment was positive as most participants were in favour of a high-beta portfolio.

#### Revised plan for Farzad gas field

The overseas arm of India's Oil and Natural Gas Corp has submitted a revised plan to develop the giant Farzad B gas block in Iran, including a commitment to spend more than \$3 billion, a senior executive said. ONGC Videsh expects to produce between 1 billion and 1.6 billion cubic feet per day of gas in five years from the start of development of the block, N. K. Verma, the company's managing director told.

#### What

- India is the second-largest buyer of Iranian crude, and was among the few countries to continue trade with Iran while the country faced Western sanctions over its nuclear programme.
- But since the lifting of some of the sanctions last year, Iran has sought other investors and there is some uncertainty whether the Farzad block contract will be awarded to an Indian company. The impasse has led Indian refiners to plan on cutting imports from Iran by a fifth in 2017-18.
- ONGC Videsh expects to raise production during the fiscal year ending in March 2018 to 14 million tonnes oil equivalent, up from 12 million tonnes in the fiscal year of 2017.
- The company also plans to invest \$45 million to produce from gas wells owned by Imperial Energy, which ONGC Videsh acquired in 2008.

#### Wisden's leading cricketer in the World for 2016

Indian captain **Virat Kohli was named Wisden's Leading Cricketer in the World for 2016**, adding another feather to his already crowded cap. Kohli amassed 1215 Test runs at a stupendous average of 75.93 last year. Ten ODI appearances fetched him 739 runs at 92.37, while he scored 641 T20 International runs at 106.83.

#### What

- Only six batsmen have ever scored more international runs in a calendar year than Kohli but **none of them have come close to the Indian captain's average.**
- Virat Kohli, who features on the cover of the 2017 edition of the Wisden **Cricketers' Almanack**, is also the Leading Cricketer in the World for 2016, an accolade put in place in 2003 when Ricky Ponting became the **first honouree,**" Wisden announced.
- Owing to his phenomenal run with the bat, **Kohli had won the prestigious 'Polly Umrigar award' presented to the 'International Cricketer of the Year' at the BCCI Annual Awards.**
- Kohli has already been declared Wisden India **Almanack's Cricketer of the Year** for the second time in its 2017 edition.
- Two Pakistani cricketers — Misbah—ul—Haq and Younis Khan — have been named in the list of the five Cricketers of the Year for the first time since 1997.
- With Misbah and Younis making the list, the total number of Pakistanis to have **been chosen Cricketers of the Year went up to 14, one less than India's tally of 15.**

#### Wisden Cricketers' Almanack honours:

- Leading Cricketer in the World: Virat Kohli
- Leading Woman Cricketer in the World: Ellyse Perry
- Five Cricketers of the Year: Misbah-ul-Haq, Younis Khan, Ben Duckett, Toby Roland-Jones, Chris Woakes.

### President of India presents SCOPE Awards

The President of India, Shri Pranab Mukherjee presented the Standing Conference of Public Enterprises (SCOPE) Awards at the 8th Public Sector Day function held in New Delhi on April 11, 2017. Speaking on the occasion, the President said that celebrating this Day is an acknowledgement of the invaluable contribution made by our Central Public Sector Enterprises (CPSEs) since independence when PSEs had been chosen as the vehicle of industrialization in our country.

What

1. The President said that in our country we started with only five PSEs with an investment of 29 crore. However, their growth over the years is very substantial.
2. Their overall net profit increased by 12.5 percent during 2015-16. This is appreciable since they have continued to perform well despite the fact that the global fiscal and economic scenario and industrial climate is not very encouraging.
3. India is a fast growing economy and many more glorious chapters will be added to the credit of PSEs in the future too.

### ICIJ wins Pulitzer for Panama Papers

The Pulitzer Prizes honoured International Consortium of Investigative Journalists (ICIJ) for its work on Panama Papers. The ICIJ spearheaded a team of over 300 reporters, spread across six continents, to expose the offshore tax havens used by high-profile individuals across the world. In a series of hard-hitting reportage, over 11 million leaked documents from Mossack Fonseca revealed how the law firm had helped individuals set up shell companies to evade paying taxes.

What

1. **In India over 500 Indians who figured in the Fonseca's list of offshore companies, foundations and trusts.**
2. ICIJ entered the race in the International Reporting category, but it was later moved to Explanatory Reporting by the Pulitzer board. The 19-member Pulitzer board is made up of past winners and other distinguished journalists and academics.
3. It chose the winners with the help of 102 jurors. More than 2,500 entries were submitted this year, competing for 21 prizes. Seven of the awards recognize fiction, drama, history, biographies, poetry, general nonfiction and music.
4. The Pulitzers began in 1917 after a bequest from newspaper publisher Joseph Pulitzer.

### WhatsApp privacy policy matter

A Constitution Bench of five judges will decide on April 18 whether a larger denomination of judges should hear a petition for a declaration that a 2016 policy of instant messaging app — WhatsApp — to give Facebook access to information and personal details shared by millions of its users is a violation of their privacy and free speech.

What

1. The case is based on a petition by two young students — 19-year-old Karmanya Singh Sareen and 22-year-old Shreya Sethi — to challenge the contract entered into between the two Internet giants to provide access to calls, photographs, texts, videos and documents shared by users despite the fact that privacy is prized and guaranteed by WhatsApp.
2. The duo was aggrieved by the Delhi High Court decision to uphold the contract. The High Court took a nuanced position by confirming the legality of the policy **effective from September 25 though directing WhatsApp to “delete completely”** from its server information/ data/ details of all users who choose to delete their account.
3. On appeal, the Supreme Court responded by directing Facebook, WhatsApp, the Centre and Telecom Regulatory Authority of India (TRAI) to file responses and roped in Attorney-General Mukul Rohatgi to assist it in the case.

4. He referred to the 1954 eight-judge Bench verdict in M.P. Sharma's case and the six-judge Bench judgment of 1962 in Kharak Singh case on the right to privacy. Both judgments had categorically rejected the existence of privacy as a guaranteed right under Article 21 of the Constitution.
5. On April 18, the five-judge Constitution Bench may decide convenient dates for presentation of arguments in the matter. There is also likelihood that the hearing in the case on merits may start only after July 2, post the court's summer vacations.

#### GBU-43 bomb dropped

The United States on April 13, 2017, dropped a massive GBU-43 bomb in eastern Afghanistan against a series of caves used by Islamic State militants. According to the Afghanistan officials, the bomb killed over 30 Islamic State militants in the area.

What is the GBU-43 bomb?

1. The Massive Ordnance Air Blast bomb (MOAB) **also known as the 'mother of all bombs' is the** largest non-nuclear bomb ever deployed in combat by the United States.
2. The GBU-43 is a 21,600 pound (9,797 kg) GPS-guided munition and was first tested in March 2003, just days before the start of the Iraq war.
3. It is a demolition bomb containing 18,700 pounds (8,480 kilogrammes) of the explosive H6, with a blast yield equivalent to 11 tons of TNT. Nine metres (30 feet) long, with a diameter of one metre, according to GlobalSecurity.org, it is the largest-ever satellite-guided, air-delivered weapon in history.

What was the MOAB designed for?

1. The MOAB is a custom-made Air Force weapon that has been in the arsenal for more than a decade.
2. It is designed to hit softer targets such as surface facilities, tunnel entrances and troop concentrations.
3. It is a concussive bomb, meaning it is designed to detonate before it hits the ground. Its thin aluminium skin helps to maximise its blast radius and generate a shockwave.

How is the MOAB deployed?

1. The MOAB is dropped off from the cargo ramp of a C-130 transport plane with its descent slowed by parachute.
2. This means it can be deployed from a greater height, thereby offering pilots more time to reach safety.

#### World Health Day

The World Health Day (WHD) is observed every year on 7 April to mark the anniversary of the founding of the World Health Organization (WHO). The day focuses on disseminating knowledge and awareness about human health, increasing life expectancy by adding good health to the lives of people and promoting healthier living habits across the globe. The day also provides with a unique opportunity to mobilize action around a specific health topic of concern to people all over the world. The theme of this year is:

**"Depression: Let's talk".**

#### Background

1. The World Health Organisation (WHO) annually marks World Health Day on 7 April to celebrate its founding in 1948.
2. It is one of eight official global public health campaigns marked by WHO. On this day in 1948, the first World Health Assembly was held Geneva, Switzerland.

#### Who made the bomb?

1. The MOAB was developed in 2002-2003 by Alabama-based aerospace and Defence Company Dynetics in partnership with the Air Force Research Lab (AFRL).
2. The bomb's preliminary concept was developed into a detailed design within just three months, and successfully tested three times in 13 days.
3. According to the Air Force, the last time the MOAB was tested in 2003, a huge mushroom cloud could be seen from 32 km away.

3. Since then the World Health Assembly decided to celebrate 7 April of each year with effect from 1950 as the World Health Day.

#### Bharat ke Veer web portal launched

The Union Ministry of Home Affairs has launched web portal and mobile application named “Bharat ke Veer” to enable people to contribute towards family of martyrs from central paramilitary forces. It was launched by Union Home Minister Rajnath Singh on the occasion of Valour Day of Central Reserve Police Force (CRPF), observed on 9 April.

#### What

1. The portal and application is an IT based platform to enable willing donors to contribute towards the family of a braveheart who have sacrificed their life in line of **duty or towards the ‘Bharat Ke Veer’ corpus.**
2. This online donation platform is technically supported by National Informatics Centre (NIC) and powered by State Bank of India (SBI).
3. The amount so **donated through it will be credited to the account of ‘Next of Kin’** of those Central Armed Police Force or Central Para Military Force soldiers.
4. To ensure maximum coverage, a cap of Rs. 15 lakh is imposed on donation and donors will be alerted if amount exceeds, so they can choose to divert part of the donation to another account or the corpus.
5. Bharat Ke Veer corpus will be managed by a committee made up of eminent persons of repute and senior Government officials.
6. The committee will decide to **disbursement of fund equitably to braveheart’s family** on need basis.

#### Railways top in corruption

Corruption complaints against various government departments jumped by a whopping 67 per cent in 2016 over the previous year, with the Railways topping the list. Over 11,000 complaints were received against the public sector behemoth, the Central Vigilance Commission (CVC) has said. In its annual report tabled in Parliament recently, the probity watchdog said it received a total of 49,847 complaints in 2016, as against 29,838 in 2015 -- an increase of 67 per cent. The Commission received a considerable number of complaints against public servants working in the state governments and other organisations who do not come under the jurisdiction of the Commission or which are of administrative nature.

#### What

1. The number of complaints received by the CVC in 2015 was 50 per cent less than a total of 62,363 received by it in 2014. The CVC had got 31,432 and 37,039 complaints of alleged corruption during 2013 and 2012 respectively, the report said.
2. Giving details, the CVC said the highest of 11,200 such complaints were against railway employees. Of these 8,852 were disposed of and 2,348 were pending. Further, a total of 1,054 complaints against railway employees were pending for more than six months.
3. The number of complaints against those under government of National Capital Territory of Delhi has declined with a total of 969 received last year as against 5,139 in 2015.

#### World Homoeopathy Day

The World Homoeopathy Day is observed every year on April 10 to pay tribute to Dr. Christian Friedrich Samuel Hahnemann, founder and father of Homeopathy system of medicine. This year it is 262nd birth anniversary of the founder of Homoeopathy. On this occasion, AYUSH Ministry had organised International Convention on World **Homoeopathy Day with theme** “Enhancing Quality Research in Homoeopathy through scientific evidence and rich clinical experiences”.

#### India’s solar power capacity

India added 5,525 MW solar power generation capacity last fiscal, taking the total from this clean source to 12,288 MW. The country has abundant solar power potential which has been estimated to be 748 GW, New & Renewable Energy Minister Piyush Goyal stated.

It had achieved total cumulative solar power generation capacity of 6,763 MW in 2015-16. The capacity was 1,686 MW in 2012-13 which increased to 2,632 MW in 2013-14 and to 3,744 MW in 2014-15.

What

1. The government has envisaged 4,800 MW from rooftop solar and 7,200 MW from large scale solar power projects in the country.
2. India has plans to add 5,000 MW of rooftop solar and 10,000 MW from large scale solar power projects in the current fiscal.
3. Among states, Andhra Pradesh tops the chart with largest cumulative solar generation capacity of 1,867 MW as on March 31, 2017 followed by Rajasthan and Tamil Nadu at 1,812 MW and 1,691 MW respectively.
4. Submission to the United Nations Frame Work Convention on Climate Change on Intended Nationally Determined Contribution (INDC), the government has said that India will achieve 40 per cent cumulative Electric power capacity from non-fossil fuel based energy resources by 2030.
5. It will be done with the help of transfer of technology and low cost International Finance which includes Green Climate Fund.