

Brain Tree

Current Events



16th to 31st May, 2018

1. The Union Cabinet has approved the establishment of **National Institute of Mental Health Rehabilitation (NIMHR)** at Bhopal.
 - NIMHR will be the first of its kind in the country in the area of mental health rehabilitation.
 - It will serve as an institution of excellence to develop capacity building in the area of mental health rehabilitation and also help the Government to develop models for effective rehabilitation of persons with mental illness.
 - NIMHR has been established as a Society under the Societies Registration Act, 1860 under the aegis of the Department of Empowerment of Persons with Disabilities.
 - The main objectives of the NIMHR are to provide rehabilitation services to the persons with mental illness, capacity development in the area of mental health rehabilitation, policy framing and advanced research in mental health rehabilitation.
 - The Institute will conduct 12 courses to offer diploma, certificate, graduate, post graduate, M.Phil degrees in the area of mental health rehabilitation
2. The Union Cabinet has approved National Policy on Biofuels – 2018.
 - With a thrust on Advanced Biofuels, the Policy indicates a viability gap funding scheme for Second Generation ethanol Bio refineries of Rs.5000 crore in 6 years in addition to additional tax incentives, higher purchase price as compared to First Generation biofuels.
 - Farmers are at a risk of not getting appropriate price for their produce during the surplus production phase. Taking this into account, the Policy allows use of surplus food grains for production of ethanol for blending with petrol with the approval of National Biofuel Coordination Committee

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Classification of Biofuels

First generation biofuels are also called conventional biofuels. They are made from things like sugar, starch, or vegetable oil. Any biofuel made from a feedstock that can also be consumed as a human food is considered a first-generation biofuel.

Second generation biofuels are produced from sustainable feedstock. Second generation biofuels are not food crops, though certain food products can become second generation fuels when they are no longer useful for consumption. Second generation biofuels are often called “advanced biofuels”.

3. Cabinet has approved development of Trunk Infrastructure Components for Integrated Multi Modal Logistics Hub known as “Freight Village” at Nangal Chaudhary in Haryana under Delhi Mumbai Industrial Corridor Project.

A ‘Freight Village’ is a specialised industrial estate which attracts companies that require logistics services and can cluster to improve their competitiveness. This will allow relocation of retailers, warehouse operators and logistics service providers supplying the regional FMCG market. Due to its proximity to the main city, it will serve as a distribution centre and as a point of transfer between long distance transport by truck, rail and waterway and short distance distribution with delivery vans. ‘Freight Village’ includes an inter-modal terminal, which facilitates integration between different modes of transport.

4. The government has launched the **Intellectual Property (IP)** mascot ‘IP Nani’. IP Nani is a tech-savvy grandmother who helps the government and enforcement agencies in combating IP crimes with the help of her grandson “Chhotu” aka Aditya. The IP mascot will spread awareness about the importance of Intellectual Property Rights (IPRs) among people, especially children, in an interesting manner. This character is also in line with the **World Intellectual Property Organization’s (WIPO)** campaign for the World IP Day which celebrates the brilliance, ingenuity, curiosity and courage of the women who are driving change in our world and shaping our common future.
5. The Cabinet Committee on Economic Affairs has given its approval for enhancing the budget of **Network For Spectrum (NFS)** project by Rs.11,330 crore.

Network for Spectrum (NFS) Project:

NFS project is for installing alternate communication network for Defence Services, which will boost the communication capabilities of the Defence Forces

in a major way leading to enhanced national operational preparedness.

The Project is being implemented by **Bharat Sanchar Nigam Limited (BSNL)**. The project is crucial since the armed forces will migrate all their communication needs to this optic-fibre network and free more bandwidth for commercial telephony services.

6. **Swachh Survekshan 2018**

- Indore has emerged as the cleanest city, followed by Bhopal and Chandigarh. Indore was the cleanest city last year as well.
- Jharkhand has been adjudged as the best performing state, followed by Maharashtra and Chhattisgarh.
- Cleanest State Capital/UT: Greater Mumbai.
- India's 'Cleanest big City': Vijaywada (Andhra Pradesh).
- India's 'Fastest Mover' big City: Ghaziabad (Uttar Pradesh).
- India's Best City in 'Citizens Feedback': Kota (Rajasthan).
- India's Best City in 'Innovation & Best Practices': Nagpur (Maharashtra).
- India's Best City in 'Solid Waste Management: Navi Mumbai (Maharashtra).
- India's Cleanest Medium City: Mysuru (Karnataka).
- India's 'Fastest Mover' Medium City: Bhiwandi (Maharashtra).
- India's Best City in 'Citizens Feedback': Parbhani (Maharashtra).
- India's Best City in 'Innovation & Best Practices': Aligarh (Uttar Pradesh).
- India's Best City in 'Solid Waste Management: Mangalore (Karnataka).
- India's Cleanest Small City: New Delhi Municipal Council.
- India's 'Fastest Mover' Small City: Bhusawal (Maharashtra).
- India's Best City in 'Citizens Feedback': Giridih (Jharkhand).
- India's Best City in 'Innovation & Best Practices': Ambikapur (Jharkhand).
- India's Best City in 'Solid Waste Management: Tirupati (Andhra Pradesh).

It was organized by the **Ministry of Housing and Urban Affairs (MoHUA)**, under the aegis of the **Swachh Bharat Mission (Urban)**. It assessed 4203 Urban Local Bodies.

Compared to the previous surveys, this year's exercise allocated substantial weightage to the feedback from citizens based on their daily experience. The

on-field survey for Swachh Survekshan was conducted by an independent agency and the data for ranking of the cities collected from 3 sources:

Service Level Progress: To verify whether systems and processes are in place in **Urban Local Bodies (ULBs)** to implement Swachh Bharat Mission (Urban) in the most efficient way.

Direct Observation: To verify and assess general cleanliness in the cities by making random field visits in different parts of the city and public conveniences (Community/Public Toilets).

Citizens Feedback: To collect feedback directly from citizens and monitor the performance of Swachhata App, a citizens grievance Mobile App.

7. WHO has published its first Essential Diagnostics List, a catalogue of the tests needed to diagnose the most common conditions as well as a number of global priority diseases? The aim is to provide a tool that can be used by all countries, to test and treat better, and also to use health funds more efficiently by concentrating on the truly essential tests.
8. NASA's GRACE mission has confirmed that a massive redistribution of freshwater is occurring across the Earth, with middle-latitude belts drying and the tropics and higher latitudes gaining water supplies.
 - The resulting map of the findings shows an overall pattern, in which ice sheets and glaciers lose by far the most mass at the poles, but at the same time, middle latitudes show multiple areas of growing dryness even as higher latitudes and the tropical belt tend to see increases in water.
 - The study emphasizes that the 34 separate changes that it detects do not all have the same cause – not even close.
 - There's very strong suspicion that the melting of glaciers and ice sheets is tied to climate change. On land, it's possible that some droughts and rainfall increases may be also, though the study is cautious about that, noting that natural variability can also be a major factor here.
 - There are also some major cases of humans increasing water storage in the landscape, particularly in China, where massive dam construction has created enormous reservoirs.
 - Mainly, though, what's striking about the map is the way that a combination of human-driven water withdrawals and droughts seem to be punishing the central latitudes of the northern hemisphere in particular, but also the southern hemisphere to a significant extent.

9. The Commission for Scientific and Technical Terminology has decided to adopt the word 'AYUSH' in Hindi and English languages for scientific and technical purposes. "**AYUSH**" is an acronym for five traditional and complementary systems of medicine, namely **Ayurveda**, **Yoga & Naturopathy**, **Unani**, **Siddha** and **Homoeopathy**, which is used in all government communications.
- As approved by the Commission, the word 'Ayush' will have the meaning "Traditional and Non-Conventional Systems of Health Care and Healing which include Ayurveda, Yoga, Naturopathy, Unani, Siddha, Sowa Rigpa, Homoeopathy etc.

The **Commission for Scientific & Technical Terminology (CS TT)** was set up on December 21, 1960 by a resolution of Government of India under the proviso to Clause (4) of Article 344 of the Constitution with the objective to evolve and define scientific and technical terms in Hindi and all Indian languages; publish glossaries, definitional dictionaries and encyclopedia.

10. The BRICS Ministerial on Environment has agreed to include "Green Good Deeds" in its official agenda in the next Ministerial in Brazil and another meeting in Russia.

The campaign has been launched by the Environment Ministry to sensitize the people and students about climate change and global warming. The objective of the campaign is to restore and return the clean and green environment to the next generation. The Ministry of Environment, Forest & Climate Change had drawn up a list of over 500 Green Good Deeds and asked people to alter their behavior to Green Good Behavior to fulfil their Green Social Responsibility.

11. Pakistan's top civil and military leaders have decided to give greater administrative and financial authority to Pakistan-administered Kashmir and Gilgit-Baltistan. India has termed as "entirely unacceptable" any possible attempt by Pakistan to declare the Gilgit-Baltistan region, bordering the disputed Pakistan-administered Kashmir, as the fifth province.

Gilgit Baltistan is located in the northern Pakistan. It borders China in the North, Afghanistan in the west, Tajikistan in the north west and Kashmir in the south east. Gilgit-Baltistan is treated as a separate geographical entity by Pakistan. It has a regional Assembly and an elected Chief Minister.

Gilgit-Baltistan shares a geographical boundary with Pakistan-occupied Kashmir and India considers it as part of the undivided Jammu and Kashmir, while Pakistan sees it as a separate from PoK. The USD 46 billion China-

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

12. INSV Tarini has completed a historic global Circumnavigation. This is the first-ever Indian circumnavigation of the globe by an all-women crew. The expedition titled ‘Navika Sagar Parikrama’ is in consonance with the National policy to empower women to attain their full potential. It has showcased ‘Nari Shakti’ on the world platform and helped change societal attitudes and mindset towards women in India by raising visibility of their participation in challenging environs.
13. Nari Shakti Puraskar 2017 was recently presented to the INSV Tarini Team by the President of India, Shri Ram Nath Kovind, on International Women’s Day(08th March 2018) at Rashtrapati Bhavan.

To acknowledge Women’s achievements, the Government of India confers Nari Shakti Puraskars on eminent women and institutions in recognition of their service towards the cause of women empowerment. The Nari Shakti Awards were initiated in the year 1999. The Ministry of Women and Child Development announces these national level awards for eminent women, organisations and institutions. The Nari Shakti Puraskar carries a cash award of Rs.1 Lakh and a certificate for individuals and institutions.

14. Kerala health department is on high alert in the wake of deaths due to the ‘Nipah’ virus (NiV). The government has set up a task force to monitor the cases and contain the spread of this fast spreading virus which has a reported mortality rate of 70%.

According to WHO, the Nipah virus infection is a newly emerging zoonosis, that is, a disease transmitted from animals to humans. The virus belongs to a new genus termed Henipavirus (subfamily Paramyxovirinae). It was first identified in 1998 at Kampung Sungai Nipah village, Malaysia. The virus is named after this village.

Symptoms: The symptoms of Nipah are similar to that of influenza: fever, muscle pain, and respiratory problems. Inflammation of the brain can also cause disorientation. Late onset of Encephalitis can also occur. Sometimes a person can have an asymptomatic infection, and be a carrier of Nipah and not show any symptoms.

Currently, there are no vaccines for both humans and animals. Intensive supportive care is given to humans infected by Nipah virus.

According to WHO, ribavarin can reduce the symptoms of nausea, vomiting, and convulsions associated with the disease. Individuals infected need to be hospitalized and isolated. Special care should be taken to prevent human-to-human transmission. Surveillance systems should be established to detect the virus quickly and to initiate appropriate control measures.

15. The 330 MW Kishanganga Hydropower Project was recently inaugurated by the Prime Minister in northern Kashmir's Gurez. The PM also laid down the foundation stone for Pakal Dul hydro power project

Kishanganga Hydroelectric project is an \$864 million dam which is part of a run-of-the-river hydroelectric scheme that is designed to divert water from the Kishanganga River to a power plant in the Jhelum River basin. It is located 5 km north of Bandipore in Jammu and Kashmir. It also lies to the north of Wular Lake. The state of Jammu and Kashmir would be provided with 12 percent of the power generated by the project

Pakistan has raised several objections to the Kishanganga Project in the past. Pakistan has complained that the Kishanganga Project affects its own Neelum Jhelum Hydropower Plant. However, India maintains that the project would not have any impact on rivers flowing into the neighbouring country. Construction on the dam was temporarily halted by the Hague's Permanent Court of Arbitration in October 2011 due to Pakistan's protest of its effect on the flow of the Kishanganga River (called the Neelum River in Pakistan). In February 2013, the Hague ruled that India could divert a minimum amount of water for power generation. Pakistan has been flagging concern over designs of India's five hydroelectricity projects – Pakal Dul (1000 MW), Ratle (850 MW), Kishanganga (330 MW), Miyar (120 MW) and Lower Kalnai (48 MW) – being built/planned in the Indus river basin, contending these violate the treaty.

Pakal Dul hydro power project is a 1,000 megawatt hydroelectric power project on Marusadar River, a tributary of Chenab River, in Jammu and Kashmir. It will provide 12% free power to the state. The project will not only be the largest hydroelectric power project in the state but also the first storage unit.

16. Pakistan is hosting its first ever Shanghai Cooperation Organisation-Regional Anti-Terrorist Structure (SCO-RATS) meeting in Islamabad. The participants of the meeting include the executive committee of the SCO and of RATS along with

legal advisors from eight member states. The main agenda is to talk over the issue related to terrorist threats in the region and how to overcome them.

RATS: The **R**egional **A**nti-**T**errorist **S**tructure (**RATS**), headquartered in Tashkent, Uzbekistan, is a permanent organ of the **S**hanghai **C**ooperation **O**rganisation (**SCO**) which serves to promote cooperation of member states against the three evils of terrorism, separatism and extremism. The Head of RATS is elected to a three-year term. Each member state also sends a permanent representative to RATS

17. May 22 is observed as The **I**nternational **D**ay for **B**iological Diversity (**IDB**). Theme for 2018 is “Celebrating 25 Years of Action for Biodiversity”.
18. Vice-President M Venkaiah Naidu recently laid the foundation-stone for the southern campus of the **N**ational **I**nstitute of **D**isaster **M**anagement (**NIDM**) at Kondapavuluru village of Gannavaram mandal in Andhra Pradesh.

NIDM is a premier institute of the Government of India under the Ministry of Home Affairs. It was constituted under an Act of Parliament with a vision to play the role of a premier institute for capacity development in India and the region. Under the Disaster Management Act 2005, NIDM has been assigned nodal responsibilities for human resource development, capacity building, training, research, documentation and policy advocacy in the field of disaster management. NIDM also serves as international **S**AARC **D**isaster **M**anagement **C**entre (**SDMC**) and works as focus for its operation and planning.

19. The Union Cabinet has approved an ordinance to set up the **country's first National Sports University in Manipur**. A bill to set up the university in Imphal is already pending in parliament. The ordinance will be on the lines of the bill introduced in Lok Sabha in August, 2017. The key objectives of the University are: (i) research, development and dissemination of knowledge in physical education and sports sciences, (ii) strengthening physical education and sports training programmes, (iii) generating knowledge capabilities, skills and competence at various levels, and (iv) training talented athletes to help them to evolve into international level athletes.
20. MHA has created a new Division to address issues of women safety comprehensively. The division, headed by a joint secretary level officer, would deal with all aspects of women's safety in coordination with the relevant ministries, departments and state governments. Besides dealing with crimes against women, the new division will deal with crimes against SCs and STs, crimes against children and elderly persons, the anti-trafficking cell, matters

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relating to prison legislation and prison reforms, all schemes under the Nirbhaya fund, Crime and Criminal Tracking and Network System and the National Crime Records Bureau. In order to address offences against women, particularly rape, in a time-bound manner, the division would focus to enhance capacity of the existing administrative, investigative, prosecution and judicial machinery, along with appropriate measures for rehabilitation of victims and bringing attitudinal changes in society.

21. The United States has decided to disinvite China from participating in the Rim of the Pacific naval exercise, held near Hawaii. The decision to withdraw the invitation extended to China was made in response to Chinese activity in the South China Sea.

RIMPAC is the world's largest set of international maritime war games. The exercises occur every two years and are led by the U.S. Navy's Pacific Fleet, headquartered in Honolulu, Hawaii. They are seen as a unique opportunity for Pacific Rim nations to cooperate as they train and work together to solve problems. Also, the games are seen as a way of ensuring open access to important shipping lanes in Asia's increasingly contested waters. The exercises are also a display of power — in the sense that participants are able to understand the technological capabilities of other participants — and thus perhaps act as a deterrent to further aggressive action.

Observer nations: Several observer nations are usually invited, including China, Ecuador, India, Mexico, the Philippines, and Russia. While not contributing any ships, observer nations are involved in RIMPAC at the strategic level and use the opportunity to prepare for possible full participation in the future.

22. DRDO chairman S Christopher stated that Rustom- 2 drones will be delivered to the Indian armed forces by 2020.

Rustom 2 drone is a medium-altitude, long-endurance unmanned aerial vehicle, developed on the lines of predator drones of the United States. The objective of this drone is to carry out surveillance for the armed forces with an endurance of 24 hours. The drone was developed for use by all three services of the Indian armed forces, primarily for intelligence, surveillance and reconnaissance (ISR) operations.

The medium-altitude prototype can fly at over 22,000 ft and is a long-endurance (MALE) UAV that has an approximate flight time of 20 hours. It can fly at around 280 km/h and carry a variety of payloads like **Medium Range Electro Optic (MREO)**, **Long Range Electro Optic (LREO)**, **Synthetic Aperture**

Radar (SAR), Electronic Intelligence (ELINT). Rustom 2 can fly missions on manual as well as autonomous modes. The onboard way-point navigation system allows the drone to conduct missions autonomously.

23. Union Human Resource Development Ministry has launched Samagra Shiksha scheme for school education. Samagra Shiksha is a program that unifies learning from the pre-school to class 12 levels and encapsulates elements of the Sarva Shiksha Abhiyan, Rashtriya Madhyamk Shiksha Abhiyan and teacher education. The scheme will focus on digital education. The objectives of the scheme include:

- Provision of quality education.
- Enhancing learning outcomes of students.
- Bridging social and gender gaps in school education and promoting Vocationalisation of education.
- Strengthening teacher education institutions like SCERTs and Diets to improve quality of teachers.
- Annual grant of Rs 5,000 to Rs 20,000 per school for strengthening of libraries.

24. Colombia is all set to formally become the NATO's first Latin American "global partner." Colombia will join as a "global partner", which means it will not necessarily have to take part in military action, and will be fully accredited in Brussels

The **North Atlantic Treaty Organization (NATO)** was founded in 1949 and is a group of 29 countries from Europe and North America that exists to protect the people and territory of its members. The Alliance is founded on the principle of collective defence, meaning that if one NATO Ally is attacked, then all NATO Allies are attacked.

The NATO lists Afghanistan, Australia, Iraq, Japan, the Republic of Korea, Mongolia, New Zealand and Pakistan as "partners across the globe".

25. The first edition of the Global Wind Summit will be held in Hamburg, Germany.

The conference on wind is the largest and most important meeting of the wind industry worldwide. The event combines two conferences, Wind Energy Hamburg and Wind Europe. The event will provide a platform for experts from across the globe to discuss innovative and green technologies for harnessing wind energy making. The focus of the conferences would be on three major

subjects. Dynamic markets, cost efficiency and smart energy. How to develop new markets, make product competitive in auctions and use wind power for all energy applications. India is fourth largest country — after China, the US and Germany — in terms of wind energy installation capacity at around 33 GW. The government has set a target of achieving 60 GW by 2022.

- 26.** Scientists have developed a nanocomposite material that can selectively convert environmental carbon monoxide into less toxic carbon dioxide. The new composite material is made of graphene and an alloy of platinum and palladium in the form of nanoparticles. Graphene was used as a substrate and then “decorated” with alloy nanoparticles made of platinum and palladium. The material was then used for selective oxidation of CO into CO₂. The catalytic behavior of the nanocomposite was studied using different morphologies for the oxidation of CO. The conversion rate varied along with the flow rate of CO as well as temperature, showing full conversion at temperatures ranging from 75° to 125°. The new material could find potential use in chemical industries as well as the environment.
- 27.** Ministry of Environment, Forest and Climate Change and the Wildlife Trust of India (WTI) has rolled out the ‘Gaj Yatra’ from Tura, the principal town of Garo Hills in Meghalaya. The event involves taking an elephant mascot across districts frequented by jumbo herds for generating awareness among the people. ‘Gaj Yatra’, a nationwide campaign to protect elephants, was launched on the occasion of World Elephant Day in 2017. The campaign is planned to cover 12 elephant range states. The elephant is part of India’s animal heritage and the Government celebrates this day to spread awareness about the conservation of the species. The 15 months campaign will be led by the Wildlife Trust of India (WTI). The campaign aims to create awareness about elephant corridors to encourage free movement in their habitat.
- 28.** India has concluded price negotiations with Russia for a deal to procure S-400 Triumf air defence missile systems for the Indian Air Force. S-400 is Russia’s most advanced long-range surface-to-air missile defence system.
- 29.** A platinum-group chemical element called ruthenium (Ru) is the fourth single element to have unique ferromagnetic properties at room temperature.

Ruthenium is a chemical element with symbol Ru and atomic number 44. It is a rare transition metal belonging to the platinum group of the periodic table. Like the other metals of the platinum group, ruthenium is inert to most other

chemicals. Most ruthenium produced is used in wear-resistant electrical contacts and thick-film resistors. A minor application for ruthenium is in platinum alloys and as a chemistry catalyst. A new application of ruthenium is as the capping layer for extreme ultraviolet photomasks.

Ruthenium is generally found in ores with the other platinum group metals in the Ural Mountains and in North and South America. Small but commercially important quantities are also found in pentlandite extracted from Sudbury, Ontario and in pyroxenite deposits in South Africa.

Ruthenium is interesting because it does not oxidize easily and theoretical predictions indicate it is particularly temperature-stable, which is an important property allowing scaling of magnetic memories.

Ferromagnetism is the basic mechanism by which certain materials form permanent magnets, or are attracted to magnets. So far, only three single elements were found to be ferromagnetic at room temperature: iron (Fe), cobalt (Co), and nickel (Ni); the rare earth element gadolinium (Gd) nearly misses by only 8 degrees Celsius.

Magnetic materials are very important in industry and modern technology and have been used for fundamental studies and in many everyday applications such as sensors, electric motors, generators, hard disk media, and most recently spintronic memories.

- 30.** Election Commission of India for the first time will start the use of Braille-enabled signboards for visually challenged voters in the upcoming Maheshtala Assembly by-election in West Bengal. The initiative of Braille-enabled signboards was part of the drive to make elections more accessible to persons with disabilities (PWD). The decision to use Braille-enabled signboards is a State-specific measure to ensure hassle-free polling experience for visually impaired voters.