

Brain Tree

Current Events



1st August to 15th August, 2018

1. US gives India Strategic Trade Authorisation-1 status

Strategic Trade Authorization (STA): This authorization will allow the US to export items such as electronics, lasers and sensors, information security, computers and electronics, navigation, telecommunications, aerospace etc to India.

Significance of the STA-1 for India: Traditionally, the US has placed only those countries in the STA-1 who are members of the four export control regimes: **Missile Technology Control Regime (MTCR)**, **Wassenaar Arrangement (WA)**, **Australia Group (AG)** and the NSG. (though India's membership has been pending before the NSG). With the STA-1 India will get access to the latest defence technologies from the US.

India is the only South Asian nation on the STA-1 list that has 36 countries. Other Asian countries designated as STA-1 are Japan and South Korea. Till recently, India was classified as an STA-2 country along with seven others.

2. NASA's **Transiting Exoplanet Survey Satellite (TESS)** starts operations. The project was led by Massachusetts Institute of Technology with seed funding from Google.

TESS is NASA's latest satellite to search for planets outside our solar system, known as exoplanets. The mission will spend the next two years monitoring the nearest and brightest stars for periodic dips in their light. These events, called transits, suggest that a planet may be passing in front of its star. TESS is expected to find thousands of planets using this method, some of which could potentially support life.

TESS will occupy a never-before-used orbit high above Earth. The elliptical orbit, called P/2, is exactly half of the moon's orbital period; this means that TESS will orbit Earth every 13.7 days. Its closest point to Earth (67,000 miles or 108,000 kilometers) is about triple the distance of geosynchronous orbit, where most communications satellites operate.

3. The cabinet has given its nod to introduce a Bill to restore the original provisions of the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989, which the Supreme Court had struck down in a March ruling.

Background: On March 20, the Supreme Court issued a slew of guidelines to protect people against arbitrary arrests under the Act, directing that public servants could be arrested only with the written permission of their appointing authority, while in the case of private employees, the Senior Superintendent of Police concerned should allow it. A preliminary inquiry should be conducted before the FIR was registered to check if the case fell within the ambit of the Act, and whether it was frivolous or motivated, the court ruled. The ruling was greeted by a storm of protest from Dalit groups, which said the order diluted the law. Further, the court refused to stay its ruling, which led the government to push for an ordinance.

Amendment Bill seeks to insert three new clauses:

- i. “Preliminary enquiry shall not be required for registration of a First Information Report against any person.”
- ii. Stipulates that the arrest of a person accused of having committed an offence under the Act would not require any approval.
- iii. The provisions of Section 438 of the Code of Criminal Procedure — which deals with anticipatory bail — shall not apply to a case under this Act, “notwithstanding any judgment or order of any Court.”

SC/ST Act: The SC/ST Act was enacted on September 9, 1989. The rules for the Act were notified on March 31, 1995. The prime objective of the SC/ST Act is to deliver justice to marginalized through proactive efforts, giving them a life of dignity, self-esteem and a life without fear, violence or suppression from the dominant castes.

Act lists 22 offences relating to various patterns or behaviors inflicting criminal offences and breaking the self-respect and esteem of the scheduled castes and tribe’s community. This includes denial of economic, democratic and social rights.

According to the SC/ST Act, the protection is provided from social disabilities such as denial of access to certain places and to use customary passage, personal atrocities like forceful drinking or eating of inedible food sexual exploitation, injury etc, atrocities affecting properties, malicious prosecution, political disabilities and economic exploitation.

4. Union Ministry of Culture has launched- 'Seva Bhoj Yojna'- a scheme to reimburse central share of CGST and IGST on food, prasada, langar or bhandara offered by religious and charitable institutions. The main objective of the scheme is to lessen the financial burden of such charitable religious institutions, which provide free of cost without any discrimination to the general public and devotees.
5. The Union Cabinet has approved the policy to permit exploration and exploitation of unconventional hydrocarbons such as Shale oil/gas, Coal Bed Methane (CBM) etc.

Coal Bed Methane (CBM) is an unconventional form of natural gas found in coal deposits or coal seams. CMB is formed during the process of coalification, the transformation of plant material into coal. It is considered a valuable energy resource with reserves and production having grown nearly every year since 1989. Varied methods of recovery make CBM a stable source of energy.

Shale gas is a natural gas formed from being trapped within shale formations. It is unconventional source of methane, like coal-bed gas (in coal seams) and tight gas (trapped in rock formations). It is colorless, odorless gas, lighter than air. It is cheaper than natural gas, releases 50% less CO₂, hence better source for generating electricity. It also provides feedstock for petrochemicals industry, which is turned into fertilizer, plastics and other useful stuff.

6. Geographical indication logo and tagline unveiled.
7. The Lok Sabha has passed the 123rd Constitutional Amendment Bill providing



for a National Commission for Backward Classes as a constitutional body.

The bill provides for the grant of constitutional status to the **National Commission for Backward Classes (NCBC)** on par with the National Commission

Training Tomorrow's Administrators

3 / 11

TODAY

for Scheduled Castes and the National Commission for Scheduled Tribes.

Powers of the President: It states that the President may specify the socially and educationally backward classes in the various states and union territories. He may do this in consultation with the Governor of the concerned state.

The duties of the NCBC include investigating and monitoring how safeguards provided to the backward classes under the Constitution and other laws are being implemented and probe specific complaints regarding violation of rights.

Report: The NCBC will be required to present annual reports to the President on working of the safeguards for backward classes. These reports will be tabled in Parliament, and in the state legislative assemblies of the concerned states.

Powers of a civil court: Under the Constitution Amendment Bill, the NCBC will have the powers of a civil court while investigating or inquiring into any complaints. These powers include: (i) summoning people and examining them on oath, (ii) requiring production of any document or public record, and (iii) receiving evidence.

- 8. World Breastfeeding Week:** August 1 to 7 every year is observed as World Breastfeeding Week. It is organized by World Alliance for Breastfeeding Action (WABA), WHO and UNICEF. The main goal is to promote exclusive breastfeeding for the first six months of life which yields tremendous health benefits, providing critical nutrients, protection from deadly diseases such as pneumonia and fostering growth and development.

Significance of breastfeeding:

- Breastfeeding within an hour of birth could prevent 20% of the newborn deaths.
- Infants who are not breastfed are 15 times more likely to die from pneumonia and 11 times more likely to die from diarrhoea than children who are exclusively breastfed, which are two leading causes of death in children under-five years of age.
- In addition, children who were not breastfed are at increased risk for diabetes, obesity, allergies, asthma, childhood leukemia, sudden infant death syndrome etc. Apart from mortality and morbidity benefits, breastfeeding also has tremendous impact on improved IQ.

MAA-Mother's Absolute Affection: the Health Ministry has initiated a nationwide programme called "MAA-Mother's Absolute Affection" to bring undiluted focus on promotion of breastfeeding and provision of services towards supporting

breastfeeding, along with ongoing efforts of routine health systems. The key components of the MAA programme are awareness generation, promotion of breastfeeding & inter personal counselling at community level, skilled support for breastfeeding at delivery points and monitoring and Award/ recognition of health facility.

World Alliance for Breastfeeding Action (WABA) is a global network of individuals and organisations concerned with the protection, promotion and support of breastfeeding worldwide based on the Innocent Declarations, the Ten Links for Nurturing the Future and the WHO/UNICEF Global Strategy for Infant and Young Child Feeding. WABA is in consultative status with UNICEF and an NGO in Special Consultative Status with the Economic and Social Council of the United Nations (ECOSOC).

9. DRDO conducted the successful test of the Ballistic Missile Interceptor Advanced Area Defence (AAD) from Abdul Kalam Island, Odisha.

Indigenously developed by DRDO, the AAD interceptor is a single-stage missile powered by solid propellants. It is an endo-atmospheric missile, capable of intercepting incoming targets at an altitude of 15 to 25 kms. It has been developed as part of indigenous efforts to have multi-layer ballistic missile defence system, capable of destroying incoming hostile ballistic missiles.

The Indian Ballistic Missile Defence (BMD) Programme is an attempt to develop and to use a multi-layered ballistic missile defence system to protect from ballistic missile attacks.

10. Lok Sabha has passed National Sports University Bill, 2018.

The Bill establishes a National Sports University located in Manipur. It will promote sports education in the areas of: (i) sports sciences, (ii) sports technology, (iii) sports management, and (iv) sports coaching. It will function as a national training centre for select sports disciplines. It may also establish campuses and study centres in other parts of the country. The University will be empowered to grant degrees, diplomas and certificates.

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.

- 11.** The Centre has withdrawn a proposal to have hubs to monitor social media traffic and trends. The decision comes after the court had questioned the proposal in a hearing on July 13, saying this may transform the country into a surveillance state.

The hub proposes to monitor social media (Facebook, Twitter, Instagram and even email) handles at the very local level in multiple languages to carry out “sentiment analysis”, track down the influence-making social media users and to categorize the conversations on social media into positive, negative and neutral sections. It also aimed to track real time the way social media receives news on government’s schemes and announcements and also political events.

It was alleged that though the stated aim of the project was to enable the government to understand the impact of social media campaigns on welfare schemes and improve the reach of such campaigns, the project had two aspects — “mass surveillance apparatus that aims at collecting and analysing huge volumes of data, and profiling people based on that” and “utilising this data to predict the mood of people online and issue responses, including those targeted at individuals or groups”.

- 12.** Akshay Venkatesh, a renowned Indian-Australian mathematician, is one of four winners of mathematics’ prestigious Fields medal, known as the Nobel Prize for math. He has won the Fields Medal for his profound contributions to an exceptionally broad range of subjects in mathematics.

The Fields medals are awarded every four years to the most promising mathematicians under the age of 40. Each winner receives a 15,000 Canadian-dollar cash prize. At least two, and preferably four people, are always honoured in the award ceremony. The prize was inaugurated in 1932 at the request of Canadian mathematician John Charles Fields, who ran the 1924 Mathematics Congress in Toronto.

- 13.** Facebook Launches Digital Literacy Library to Help Youth Build Skills Online. The Library aims to help young people build the skills they need to safely enjoy online technology.

- 14.** Defence India Startup Challenge was unveiled.

Defence India Startup Challenge is part of iDEX (Innovation for Defence Excellence) scheme announced by Prime Minister Narendra Modi in April meant to build an eco-system of innovation and entrepreneurship in India for the defence sector to make India self-reliant. It is an initiative to tap startups for

finding safe and futuristic Indian solutions to critical needs of the three Armed Forces.

A list of 11 technologies that the Army, the Navy, and the Air Force need, have been chosen. They included remote air vehicles, laser weapons, secure and safe communication systems and bandwidth, precision targeting systems, sensors, and protected and informed movement of soldiers in battle tanks. Those that come up with prototypes of usable products would be supported with 1.5 crore each and friendly procurement procedures from the Ministry under SPARK or Support for Prototype & Research Kickstart in Defence.

15. **India's first Blockchain district in Telangana:** Tech Mahindra and the Telangana government have signed an agreement to establish a Blockchain district in Hyderabad, a first-of-its-kind Centre of Excellence for Blockchain in India.
16. **IMPRINT-2:** For advancing research in the high education institutions, the government has approved 122 new research projects at a cost of Rs 112 crore under IMPRINT-2 covering Energy, Security, Healthcare, Advanced Materials, ICT and Security/Defence domains.

IMPacting Research, INnovation and Technology (IMPRINT) is a national initiative of the **Ministry of Human Resource Development (MHRD)** designed to address all major engineering challenges relevant to India through an inclusive and sustainable mode of translational research. IMPRINT-2 has been approved by Government of India (GoI) with a revised strategy under which, this national initiative will be jointly funded and steered by MHRD and **Department of Science and Technology (DST)**. While any faculty member from an MHRD funded **Higher Education Institute (HEI)** including **Centrally Funded Technical Institution (CFTI)** may lead as the Principal Investigator (PI), single or multiple partners from stake holder ministry, institutions, PSUs, strategic agencies and industry are welcome as Co-PI, partner or collaborator. Proposals under IMPRINT II Projects should (a) address any declared theme (thrust area) under one of the 10 domains of IMPRINT, and (b) connect either with already identified or new research topics defined by the PI under the same 10 domains. Projects proposals should provide clear and convincing evidence of promise for translational research leading to viable technology (product, process or prototype) development.

17. 'Mosquito Terminator': It is a special train which will help in preventing mosquito breeding along the railway tracks in Delhi. It has been launched

Training Tomorrow's Administrators

7 / 11

TODAY

jointly by the Delhi Division of Northern Railway and South Delhi Municipal Corporation (SDMC).

18. Parliament has passed the Criminal Law (Amendment) Bill, 2018. It seeks to amend the Indian Penal Code (IPC), the Evidence Act, the Code of Criminal Procedure (CrPC) and the **Protection of Children from Sexual Offences (POCSO)** Act to introduce a harsher provision to sentence convicts in cases of rape of minor girls. The measure also provides for speedy investigations and trial of all cases of rape to be mandatorily completed within two months. Further, a six-month time limit for the disposal of appeals in rape cases has also been prescribed.
19. **Maitree 2018:** annual joint military training exercise between India and Thailand. The 2018 edition of this exercise is being held in Thailand.
20. India has become home to the world's first-ever thermal battery plant. The thermal battery facility, inaugurated in Andhra Pradesh, will be owned by Bharat Energy Storage Technology Private Limited (BEST).

A thermal energy battery is used for storing and releasing thermal energy. It allows for available energy to be temporarily stored and be released for use whenever necessary. Standard battery technology is based on charging and discharging cycles mainly operated by electricity. The most commonly used Lithium-ion battery works on electrical energy. However, thermal batteries operate on thermal energy, which can be defined as energy created by temperature differences.

A thermal battery consists of two parts: a cool zone known as sink, and a hot source called source. Both these sides consist of compounds known as phase-changing materials (PCMs), which can change their state of matter on the basis of a physical/chemical reaction. When the sink of a thermal battery receives heat, it transforms physically or chemically, thereby storing energy, while the source cools down. During operation, the sink is cooled down, so it releases the stored energy, while the source heats up.

Thermal batteries can function as long as heat is available for them to operate, which can be helpful in power transmission. This can be integrated with power grids thereby boost industrial demand and provide substantial support to public transport as well. Thermal batteries can also be used in the telecom sector, where it can help boost signal strength and network connectivity, which will thereby increase internet and smartphone penetration.

- 21.** Harivansh Narayan Singh has been elected as the new deputy Chairman of Rajya Sabha.

Article 89 of the Constitution specifies that Rajya Sabha shall choose one of its MPs to be the Deputy Chairman as often as the position becomes vacant. The office becomes vacant either by resignation or removal from office or when the Rajya Sabha member's term concludes.

The Deputy Chair is the one position that is elected solely by members of Rajya Sabha. It is a critical position not just because s/he steps in when there is a vacancy in the office of Chairperson/Vice President but also because s/he plays a critical role in ensuring the smooth running of the House.

- 22.** Niryat Mitra mobile app, launched by Ministry of Commerce & Industry, The app has been developed by the Federation of Indian Export Organisations (FIEO). It provides wide range of information required to undertake international trade right from the policy provisions for export and import, applicable GST rate, available export incentives, tariff, preferential tariff, market access requirements – SPS and TBT measures. All the information is available at tariff line.
- 23.** The Khangchendzonga Biosphere Reserve becomes the 11th Biosphere Reserve from India to be included in the UNESCO designated World Network of Biosphere Reserves (WNBR). This decision was taken at the recently concluded 30th Session of International Coordinating Council (ICC) of Man and Biosphere (MAB) Programme of UNESCO held at Palembang, Indonesia.

A Biosphere Reserve is a unique and representative ecosystem of terrestrial and coastal areas which are internationally recognized, within the framework of UNESCO's Man and Biosphere (MAB) programme. The biosphere reserve should fulfill the following three objectives:

- 1) In-situ conservation of biodiversity of natural and semi-natural ecosystems and landscapes.
- 2) Contribution to sustainable economic development of the human population living within and around the Biosphere Reserve.
- 3) Provide facilities for long term ecological studies, environmental education and training and research and monitoring.

Launched in 1971, UNESCO's Man and the Biosphere Programme (MAB) is an Intergovernmental Scientific Programme that aims to establish a scientific basis for the improvement of relationships between people and their environments.

MAB combines the natural and social sciences, economics and education to improve human livelihoods and the equitable sharing of benefits, and to safeguard natural and managed ecosystems, thus promoting innovative approaches to economic development that are socially and culturally appropriate, and environmentally sustainable. Its World Network of Biosphere Reserves currently counts more than 600 sites in 122 countries all over the world, including 20 transboundary sites. Protection is granted not only to the flora and fauna of the protected region, but also to the human communities who inhabit these regions, and their ways of life.

Kanchenjunga Biosphere Reserve is a National Park and a Biosphere Reserve located in Sikkim, India. The park is named after the mountain Kangchenjunga, which with a height of 8,586 metres (28,169 ft), is the third-highest peak in the world. The Biosphere Reserve is one of the highest ecosystems in the world, reaching elevations of 1, 220 metres above sea-level. It includes a range of ecolines, varying from sub-tropic to Arctic, as well as natural forests in different biomes, which support an immensely rich diversity of forest types and habitats.

24. 10th August is observed as World Bio-Fuel Day. On this day in 1893, Sir Rudolph Diesel (inventor of the diesel engine) for the first time successfully ran mechanical engine with Peanut Oil.
25. NITI Aayog has proposed to join hands with Confederation of Indian Industry (CII) to develop a Roadmap to take India to Top 10 Ranks in Global Innovation Index (GII). India ranked 57 in GII 2018
26. Draft National Energy Storage Mission: The Expert Committee, under the chairpersonship of Secretary, Ministry of New and Renewable Energy, with representatives from relevant Ministries, industry associations, research institutions and experts constituted by the Ministry of New & Renewable Energy, came out with a draft of the NSEM.

Highlights of the draft National Energy Storage Mission (NESM):

- The draft expects to kick-start grid-connected energy storage in India, set up a regulatory framework, and encourage indigenous manufacture of batteries.
- The draft sets a “realistic target” of 15-20 gigawatt hours (GWh) of grid-connected storage within the next five years. Power grids do not currently use storage options that would help in smoothly integrating renewable energy sources.

- The mission will focus on seven verticals: indigenous manufacturing; an assessment of technology and cost trends; a policy and regulatory framework; financing, business models and market creation; research and development; standards and testing; and grid planning for energy storage.

27. The government has launched a web portal called 'PENCIL' (Platform for Effective Enforcement for No Child Labour) for effective implementation of the **National Child Labour Project (NCLP)** has been developed by the Labour Ministry. PENCIL portal has five components Child Tracking System, Complaint Corner, State Government, National Child Labour Project and Convergence.
28. Operation "Madad" has been launched by the **Southern Naval Command (SNC)** at Kochi since 09 Aug 2018 for assisting the state administration and undertaking disaster relief operations due to the unprecedented flooding experienced in many parts of Kerala, owing to incessant rainfall and release of excess water from Idukki and other dams.
29. Axis Bank is the first bank in the country to introduce Iris Scan Authentication feature for Aadhaar-based transactions through its micro ATM tablets.
30. **Laboratory for Conservation of Endangered Species (LaConES)** inaugurated at Hyderabad's **Centre for Cellular and Molecular Biology (CCMB)**. The Genetic Resource Bank will store genetic material of Indian species. It will also help in protecting India's biodiversity and environment. The state-of-the-art bank is equipped with sophisticated equipment to preserve the genetic resources that could be utilised to virtually resurrect an animal species in case it goes extinct.