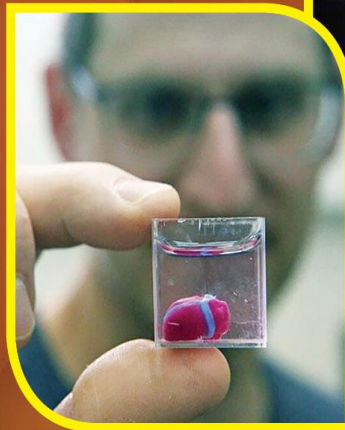
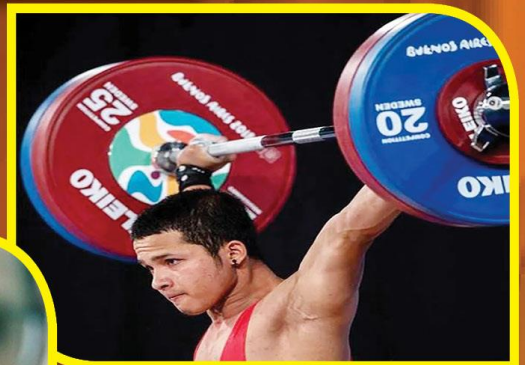
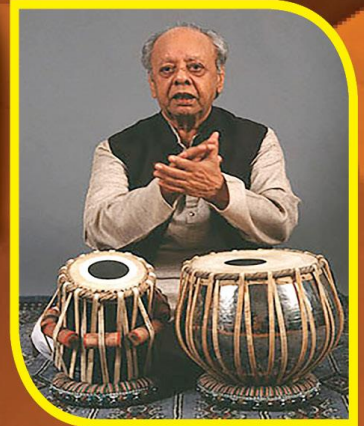


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TNPSC BITS

- ❖ Anti-corruption candidate Zuzana Caputova has won Slovakia's presidential election and become the country's first female head of state.
- ❖ President Ram Nath Kovind unveiled the plaque of the Mahatma Gandhi Auditorium at Gabriel Rene Moreno University, Bolivia to mark the 150th birth anniversary of Mahatma Gandhi.
- ❖ The Greater Chennai Corporation plans to install rooftop solar power plants in 662 buildings with a total capacity of 3,030 kilo watt (KW) and aims to save Rs.1 lakh per day on its power bill.
- ❖ The Integral Coach Factory (ICF) in Chennai is now among the largest rail coach builders in the world, beating top Chinese manufacturers.
- ❖ European country Estonia has emerged as a global leader in Online Voting (e-Voting) with 44% of votes in the recently concluded parliamentary elections.
- ❖ The Chinese Long March 3B rocket delivered a new-generation tracking and data relay satellite to orbit to provide communications support for the future human spaceflight missions and space station.
- ❖ In view of Parliamentary Elections, WhatsApp has launched a 'tipline' in India using which citizens can submit possible rumours and misinformation for verification on WhatsApp.
- ❖ Goods and Services Tax (GST) collection in March rose 15.6% from a year ago to hit ₹1.06 trillion, the highest ever tax collected since the new indirect tax system - GST took effect on 1 July 2017.
- ❖ Following mass protests by people in the North African country Algeria, its President Abdelaziz Bouteflika will resign from his position after almost being 20 years in office.
- ❖ India's Manu Sawhney on April 1, 2019 took charge as the new Chief Executive of the International Cricket Council. He is also a Non-executive Director and member of the Audit Committee of Manchester United Ltd.
- ❖ As per the Reserve Bank of India, all branches of Vijaya Bank and Dena Bank are functioning as branches of Bank of Baroda with effect from April 1, 2019. Customers of these two merged banks will be treated as customers of Bank of Baroda.
- ❖ Reliance Jio Digital Services has acquired Haptik Infotech, a conversational artificial intelligence (AI) platform to build India's largest AI assistant company across chat, voice and regional languages.
- ❖ UN Secretary-General Antonio Guterres has appointed Nicholas Koumjian, an American prosecutor, as head of a mission that will investigate alleged human rights violations on minority Rohingya Muslims in Myanmar.
- ❖ A report by OpenSignal, a company that specializes in wireless coverage mapping has declared that Dhanbad has the highest 4G availability in India (95.3% coverage) followed by Ranchi which has 95% of 4G Availability.

- ❖ BSNL has procured the “in-flight and maritime connectivity” (IFMC) license from Inmarsat, a British telecommunications satellite company that offers global mobile services.
 - This will help Airlines flying through the Indian airspace to offer their passengers Wi-Fi connectivity.
- ❖ Tamil Nadu State Government has officially notified that from April 5, 2019 Chennai Central Railway station will henceforth be renamed as Puratchi Thalaivar Dr.MGR Central railway station.
- ❖ Tamil Nadu Foodgrains Marketing Yard (TNFMY) and Madurai American College have signed an agreement to develop flavoured brown rice milk, which has health benefits; non-chemical jaggery from sugarcane juice and millet waffle for children.
- ❖ Bombay Stock Exchange (BSE) and India International Exchange (India INX) have signed a memorandum of understanding with Moscow Exchange (MOEX) to connect investor community and companies in both countries.
 - BSE and India INX are the first Indian exchanges to enter into the MoU with Moscow exchange.
- ❖ The Securities and Exchange Board of India (SEBI) has given approval to Paytm Money, the investment and wealth management platform of the mobile payments company, to start offering broking services.
- ❖ All India Football Federation president Praful Patel was elected as a FIFA Council member, becoming the first Indian to enter the prestigious panel.
- ❖ IT industry body NASSCOM has declared that it had appointed Keshav Muruges - CEO of WNS Global Services Group as its chairman for 2019-20.
- ❖ Vikram Kirloskar, CMD of Kirloskar Systems and vice-chairman of Toyota Kirloskar Motor, has assumed office as president of the Confederation of Indian Industry (CII) for 2019-20.
- ❖ Walmart-owned ecommerce company Flipkart is developing a video-based know-your-customer (KYC) solution to offer instant credit to users purchasing from its platform.
- ❖ The Indian Navy and Council of Scientific and Industrial Research (CSIR) have signed a MoU to undertake joint research and development of advanced technologies for the Indian Navy.
- ❖ Kodaikanal Hill Garlic has received Geographical Indication Tag. Unique medicinal properties, taste and flavour of the Hill garlic enabled the GI recognition.
- ❖ For the second successive year, Telangana has been ranked first in e-learning training programme of Department of Personal and Training (DoPT) of the Government India.
- ❖ Hero MotoCorp’s Chairman, Dr. Pawan Munjal was felicitated by the Asian Tour with a Special Achievement Award for his contributions to Asian Golf.

- ❖ Lori Lightfoot, a 56-years-old former federal Prosecutor has been elected as Chicago's first Black Women Mayor.
 - Lightfoot is also the first lesbian Leader for the City.
- ❖ A perimeter wall is coming up around Chennai Nanmangalam reserve forest along its boundaries to prevent garbage dumping and encroachment.
 - Nanmangalam Reserve forest is mostly a thorny scrub jungle and it is home to the highly endangered Great horned Indian Owl.
- ❖ UK government has released a white paper on 'Online harms'. It plans to make individual executives of Internet tech companies legally liable for harmful content spread on their platforms.
- ❖ The inflow of foreign capital into India's stock market in the month of March hit a high of \$ 4.89 billion, the biggest foreign inflow into Indian stocks since February 2012.
 - Investments by Foreign Institutional Investors (FII) and Foreign Portfolio Investors (FPI) in India are regulated by the Securities and Exchange Board of India (SEBI) while the ceilings on such investments are maintained by the Reserve Bank of India (RBI)
- ❖ In wake of the attack on CRPF convoy in Pulwama, the J&K government has banned the movement of civilian traffic on a 270-km stretch (Udhampur-Baramulla) of the Jammu-Srinagar-Uri NH-1.
 - The ban will be enforced 2 days a week (Wednesday and Sunday) between 4 AM – 5 PM and it extends till May 31, 2019.
- ❖ YouTube's CEO Susan Wojcicki confirmed in their annual flagship event "Brandcast" that India has become YouTube's largest and fastest growing market.
 - According to ComScore data, YouTube has more than 265 million monthly active users in India.
- ❖ The Election Commission (EC) has appointed IPS officer Ashutosh Shukla as the Director General of Police (Elections) in Tamil Nadu to take charge of election-related works involving the state police immediately.
 - Police officials in the State would be reporting to Mr. Shukla, who was heading the Prisons Department.
- ❖ In a first, Election commission will set up a polling station at Institute of Mental Health, Chennai for the reformed and family-abandoned 192 people.
 - The Institution was started in 1795 when the East India company appointed Surgeon Valentine Conolly to be in charge of a "House for accommodating persons of unsound mind."
- ❖ Hong Kong's equity market has overtaken Japan to be the world's third largest in value, behind only the U.S. and mainland China.

- ❖ National Mission for Clean Ganga (NMCG) or Namami Gange has received the distinction of “Public Water Agency of the Year” by Global Water Intelligence at the Global Water Summit in London.
- ❖ The Central government has transferred administrative control and matters concerning cow shelters, prevention of cruelty to animals and its governing law from Environment ministry to Agriculture ministry.
- ❖ 85 years old Kanniyappan from Tiruvannamalai district, a bonded labourer since his childhood, has been rescued along with 50 others by TN Revenue department and he plans to vote for the first time.
- ❖ Sudan's three decades long president Omar Hassan al-Bashir has been removed from office and arrested following months of protests against Bashir's regime.
 - Defence Minister Ahmed Awad ibn Awf announced the suspension of the 2005 constitution, along with a three-month state of emergency.
- ❖ Australian-born founder of WikiLeaks, Julian Assange was arrested in the Ecuadorian Embassy in London.
 - He faces US federal conspiracy charges related to one of the largest ever leaks of government secrets and classified data.
- ❖ US private space flight company SpaceX has carried out its first commercial launch with its Falcon Heavy rocket by placing a Saudi Arabian satellite-ARABSAT.
- ❖ The United Kingdom and the European Union have agreed to extend Brexit deal until October 31, 2019. The extension is flexible and Britain can leave once its withdrawal deal is ratified in the UK Parliament.
- ❖ Due to high imports of value-added steel for the auto sector and high-end electrical steel, for the first time in three years, India became a net importer of steel during the 2018-19 fiscal year.
- ❖ Palestinian President Mahmoud Abbas picked Mohammed Ishtayeh as the Prime Minister, who has been a long-time adviser to Abbas and a senior member of his Fatah party.
- ❖ For the 1st time, ISRO has partnered with the Central Marine Fisheries Research Institute (CMFRI) to map, validate and protect smaller wetlands in the coastal region and preserve them through coastal livelihood programmes.
 - This has been done to build a strong foundation against the effects of climate change.
- ❖ Lucknow's Christ Church College has announced that Extra “Ten marks will be added to those students' final results whose parents voted in the 2019 Lok Sabha elections.
- ❖ Prasar Bharati Chairman, A Surya Prakash released a booklet of the 'Selected speeches of Dr Bhimrao Ambedkar in the Constituent Assembly' in New Delhi.

- ❖ During the state visit of the President Ram Nath Kovind to Bolivia, Bolivia signed the framework agreement to join as the 122nd member in the International Solar Alliance.
- ❖ Google has introduced a new Cloud Based open platform called Anthos to run and manage apps from anywhere.
 - Anthos lets users run applications on existing on-premise hardware investments or in the Public Cloud.
- ❖ Emirates Islamic a bank in Dubai, UAE has announced the launch of Chat Banking services for customers via WhatsApp.
 - With this, it will become the world's first Islamic Bank to launch Banking Service via WhatsApp.
- ❖ The Puratchi Thalaivar Dr. M.G. Ramachandran Central Railway Station, lost the distinction of having the world's longest railway station name by a single letter.
 - The record for the longest railway station name, which is 58 letters long, is held by 'Llanfairpwllgwyngyllgogerychwyrndrobwllllantysiliogogoch' in Wales, UK.
- ❖ The UAE has announced that India will be the Guest of Honour country at the Abu Dhabi International Book Fair, ADIBF 2019, to be held at the end of April 2019. ADIBF was launched in 1981.
- ❖ HDFC Bank has been identified as number 1 bank by customers in India, as per Forbes World's Best Bank survey. Forbes magazine conducted the survey 23 countries. ICICI is ranked No.2 and SBI at No.11.
- ❖ Indian Oil Corporation (IOC) has bagged the prestigious 'AIMA Managing India Award 2019 for outstanding PSU of the year. The All India Management Association (AIMA) is the apex body of management professionals in the country.
- ❖ Seychelles President Danny Faure delivered a speech from deep below the ocean's surface to highlight the immediate dangers of Global warming faced by island nations like Seychelles.
 - The speech was made during a visit to an ambitious British-led science expedition, 'Nekton Mission' which aims to explore the Indian Ocean depths.
- ❖ The 4th Resilient Cities Asia-Pacific 2019 (RCAP) Congress is being organised by International Council for Local Environmental Initiatives (ICLEI) and was hosted by South Delhi Municipal Corporation in New Delhi.
- ❖ According to a study on Indian Health care by U.S. based Center for Disease Dynamics, Economics & Policy (CDDEP) India has a shortage of an estimated 6,00,000 doctors and 20,00,000 nurses.

- ❖ A team of doctors from Greece and Spain have reported the birth of a baby using DNA from three people. The baby boy has inherited the genetic material from two women and a man.
- ❖ Indian Naval Ship Kozhikode was decommissioned in a ceremony held at Naval Jetty, Visakhapatnam, Andhra Pradesh on 13th April.
- ❖ Project Kannamma is the initiative of the Rotary Club of Madras North to provide sanitary napkins to the students.
- ❖ President Ram Nath Kovind remembered the Marshal of the Air Force Arjan Singh on his birth centenary.
 - Arjan Singh (15.04.19 – 16.07.19) is the first and only officer of the Indian Air Force to be promoted to the 5-star rank as Marshal of the Indian Air Force (MIAF).
- ❖ The Reserve Bank of India (RBI) has put into circulation 50 rupees denomination banknotes signed by RBI Governor Shaktikanta Das.
 - The design of these notes is similar in all respects to Rs.50 banknotes in Mahatma Gandhi new series.
- ❖ Indian team from KIET Group of Institutions has won the 2019 'AIAA Neil Armstrong Best Design Award' in the 25th Annual Rover Challenge held at the US Space and Rocket Center in Alabama.
 - AIAA - American Institute of Aeronautics and Astronautics
- ❖ The Ministry of Home Affairs has decided to suspend cross border Line of Control (LoC) trade between Salamabad & Chakkan-da-Bagh in Jammu & Kashmir and Pak Occupied Kashmir (PoK).
- ❖ International Fleet Review (IFR) is a parade of naval ships, aircraft and submarines, and is organized by nations to promote goodwill, strengthen cooperation and showcase their organizational capabilities.
 - Indian Navy warships INS Kolkata and INS Shakti will be participating in IFR 2109, China.
- ❖ Former Cricketer Ravi Shastri is appointed as Ras Al Khaimah Economic Zone (RAKEZ) exclusive Corporate Ambassador to the Indian Business Community.
 - Ras Al Khaimah (RAK) is one of the seven emirates that make up the United Arab Emirates (UAE).
- ❖ United Nations (UN) owes India USD 38 million, the highest it has to pay to any country, for the peacekeeping operations as of March 2019.
- ❖ In a first, heart surgeons in Poland used 3D goggles to help them see inside a patient's chest as they opened up a narrowed heart valve.
- ❖ National Green Tribunal established a committee planned to examine the alleged erosion of Yamuna floodplain due to movement of heavy vehicles in Sonipat district in Haryana.
 - This committee headed by NGT chairman, Justice Adarsh Kumar Goel.

- ❖ Central government has given nod to change the name of a village in Madhya Pradesh from 'Durjanpur' to 'Shivdham'.
- ❖ A book containing English translation of the 100-year-old classic Punjabi poem written by Nanak Singh, about Jallianwala Bagh massacre, 'Khooni Vaisakhi' has released in Abu Dhabi.
 - India's Ambassador to the UAE Navdeep Singh Suri, who translated this book, commended the launch of the book.
- ❖ The first-ever global coalition on clean and efficient cooling was launched at the First Global Conference on Synergies between the 2030 Agenda and Paris Agreement in Copenhagen, Denmark.
- ❖ Saudi Arabia will host the 15th annual Summit of Group 20 leaders in November 2020.
- ❖ NASA has chosen a team led by an Indian American student, Keshav Raghvan to have its CubeSat which is a mini research satellite to be sent to space to detect cosmic rays.
- ❖ British racing driver, Lewis Hamilton has achieved his 75th career victory in Formula One's 1000th race at the Chinese Grand Prix.
- ❖ The Ministry of AYUSH has signed a memorandum of understanding (MoU) with the Council of Scientific and Industrial Research (CSIR) to boost scientific research and education on the traditional methods of treatment.
- ❖ Asia's first balloon satellite was launched by a team of girl students of Periyar Maniammai Institute of Technology, Thanjavur.
 - The satellite was named as SKI NSLV 9 (Near Space Launch Vehicle) Maniammai.
- ❖ Antares rocket built by Northrop Grumman recently lifted off from NASA's Wallops Flight Facility, Virginia carrying the "Cygnus Cargo Spacecraft" to the International Space Station.
 - The 20 mice aboard Cygnus will be used for scientific study, which aims to test the effectiveness of an anti-tetanus vaccine.
- ❖ Madras high court held that the term 'bride' as per the Hindu Marriage Act would also mean a transsexual and not just refer to someone born as a woman.
- ❖ African Nation, Malawi will be undertaking large scale pilot tests for the world's most advanced experimental malaria vaccine under the trade name Mosquirix.
 - Four successive doses of the vaccines must be administered on a strict timetable for it to work.
- ❖ The Election Commission of Bangladesh plans to conduct local government elections in that country through high technology Electronic Voting Machine (EVM).

- ❖ Union Health Ministry has decided to replace the words ‘chemist’ and ‘druggist’ with the term ‘pharmacy’.
 - This is in sync with the international practice of naming a medical shop selling medicines by the name ‘pharmacy’.
- ❖ A 15-year-old Indian-origin boy Ranveer Singh Sandhu has been lauded as Britain's youngest accountant after setting up a successful accountancy firm while still at school.
- ❖ Peru’s former President Alan Garcia shot himself on charges of corruption in Odebrecht scandal.
- ❖ Indonesia has released a special commemorative stamp on the theme of Ramayana to mark the 70th anniversary of establishment of its diplomatic ties with India.
 - The stamp features a scene from Kakawin Ramayana in which Jatayu valiantly fought to save Sita.
- ❖ StartupBlink has ranked 100 countries for startup environment of countries globally.
 - India is ranked 17th out of 120 countries.
- ❖ The Ministry of Health and Family Welfare has said that in order to curb fake, sub-standard and expired drugs, drug names and expiry date during tendering will be in Hindi/regional language along with English.
- ❖ The Ministry of Finance has asked all the departments to undertake a review of government guarantees given by respective ministries to their Central Public Sector Enterprises (CPSEs) or entities.
- ❖ According to the Financing for Sustainable Development Report (FSDR) 2019, Mobilizing sufficient resources to achieve the goals of the 2030 Agenda for Sustainable Development continues to be a central challenge at a global level.
- ❖ Malayalam film "Bhayanakam" (Fear) directed by Jayaraj won the best cinematography award at the Beijing International Film Festival.
- ❖ Israeli Prime Minister Benjamin Netanyahu has announced to name a Jewish Settlement in the Golan Heights after US President Donald Trump, who officially recognised the disputed area as Israeli territory.
 - Israel has also stated that in appreciation of the U.S. president, it intends to name a proposed train station near Jerusalem’s Western Wall after him.
- ❖ Bombay Stock Exchange (BSE) has hired the services of a private firm Network Intelligence, to provide cybersecurity services to its members in line with the cybersecurity framework set by Securities and Exchange Board of India.
 - Network Intelligence will be using its own platform BlueScope to offer 24x7 cybersecurity operations to the members.

- ❖ SBI General Insurance has launched the product “cyber defence insurance” to protect businesses from financial and reputational losses due to cyber attacks.
- ❖ Fabio Fognini became the first Italian to win an ATP Masters 1000 title at the Rolex Monte-Carlo Masters. He defeated Dusan Lajovic of Serbia.
- ❖ Reliance retail has become the first Indian retail company to clock more than Rs 1 lakh crore in annual revenues.
 - It reported an income of Rs 1,30,556 crore for 2018-19, 89% more than the previous year’s Rs 69,198 crore.
- ❖ North Korean leader Kim Jong-un and Russian President Vladimir Putin held summit talks for the time ever in the Pacific port city of Vladivostok.
- ❖ Recently the Reserve Bank of India has sold its entire stake in the National Housing Bank (NHB) and the National Bank for Agriculture & Rural Development (Nabard) to the Union Government for Rs 1,450 crore and Rs 20 crore, respectively.
- ❖ The Supreme Court has constituted a three-member inquiry committee comprising Justice SA Bobde, Justice Indira Banerjee and Justice Indu Malhotra to probe into the complaint of sexual harassment against Chief Justice of India (CJI) Ranjan Gogoi.
- ❖ World Day for Animals in Laboratories is observed every year on 24 April.
- ❖ Popular protests by people of Sudan and Algeria for a regime change is dubbed as Arab Spring 2.0.
- ❖ The report titled 'The Safety and Health at the Heart of the Future of Work - Building on 100 years of experience' has stated the Bhopal disaster was among the world's "major industrial accidents after 1919".
 - The report was released by the UN labour agency International Labour Organization (ILO).
- ❖ Malawi’s new trial anti-malarial vaccine is named as RTS, S.
- ❖ The Supreme Court has directed the RBI to disclose information pertaining to its annual inspection report of banks under the Right to Information (RTI) Act unless they are exempted under law.
- ❖ India’s well-known golf administrator Dilip Thomas was bestowed the ‘Lifetime contribution to Golf’ award by Golf Industry Association (GIA) of India.
- ❖ In a first, the UAE government has given birth certificate to a nine-month old girl who was born to an Indian Hindu father and a Muslim mother.
 - It has declared 2019 as the Year of Tolerance to highlight UAE as an exemplary example of a tolerant nation.
- ❖ Neuroscientists at University of California have created a virtual vocal tract, completes with lips, jaw and tongue, that can generate natural-sounding synthetic speech by using brain signals.

- It could help people who could not speak due to injuries suffered in accidents or strokes or of neurodegenerative disorders.
- ❖ Australia's Claire Polosak became the first female umpire to officiate in a men's One-day International at the ICC World Cricket League Division Two match.
- ❖ As a mark of protest, India skipped the Belt and Road Forum summit in Beijing for the second time.
 - India is against the China-Pakistan Economic Corridor (CPEC), a key component of the Belt and Road Initiative.
- ❖ The US Trade Representatives (USTR) placed India on its 'Priority Watch List' for lack of "sufficient measurable improvements" to India's Intellectual Property (IP) framework.
 - US threatens to take action against India based on its own law 'Section 301 report' or under World Trade organisation rules.
- ❖ Indigenously built seventh interceptor vessel named IGCS C-441 built by L & T Ltd has joined the Indian Coast Guard Service in a ceremony at Vizhinjam port, Kerala.
- ❖ Popular scriptwriter Salim Khan, national award-winning filmmaker Madhur Bhandarkar and actress Helen were honoured with the prestigious Master Deenanath Mangeshkar Award at a ceremony in Mumbai.
- ❖ A six-year-old boy Mizoram Derek C Lalchhanhima, who saved life of a chicken he accidentally ran over, has been awarded the 'Compassionate Kid' award 2019 by People for the Ethical Treatment of Animals (PETA) India.
- ❖ Sharath Kamal, Ace table tennis player was titled Sportsperson of the Year Award 2019 at the annual awards and scholarships function organised by the Tamil Nadu Sports Journalists' Association and the India Cements in Chennai.
- ❖ Ishad mango variety which is a native of Ankola, Uttara Kannada is under threat of becoming rare fruit.
- ❖ Indian Army plans to construct underground tunnels for storage of ammunition along the border with China and Pakistan.
 - Public sector enterprise NHPC is the project partner.
- ❖ Industrial Development Bank of India (IDBI) has created Iran Trade cells in five Indian cities to facilitate business transactions for Indian exporters dealing with Iran.
 - The chosen cities are Mumbai, Kolkata, Delhi, Indore and Ahmedabad.
- ❖ Scientists at the Council of Scientific & Industrial Research and Centre for Cellular and Molecular Biology have isolated an anti-microbial protein found in the milk of an egg-laying mammal called "Echidna".
 - The protein promises to serve as an alternative to antibiotics used on livestock.

- ❖ United Nations Children Fund (UNICEF) India and NITI Aayog's Atal Innovation Mission has signed a Letter of Intent to provide an open platform to promote participation, skilling and empowerment among young children across different communities.
 - The plan will be implemented through Atal Tinkering Lab which is established under Atal Innovation Mission.
- ❖ The United States has imposed sanctions on Pakistan as Pakistan refused to take back its citizen deportees and visa over-stayers from America.
- ❖ Papua New Guinea, a south-western pacific country got their One Day International (ODI) status and a place in International Cricket Council (ICC) Cricket World Cup League 2 by beating Oman by 45 runs.

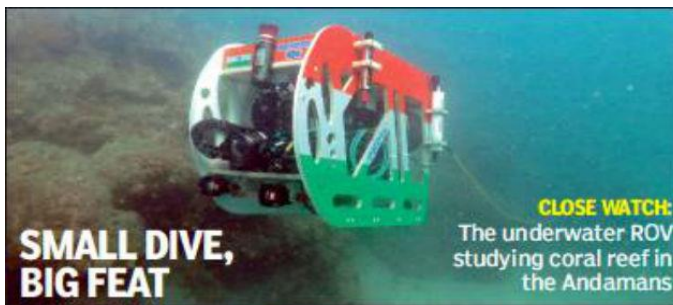
TAMILNADU

Tamilnadu Lokayukta

- ❖ The Governor of Tamilnadu has appointed retired High Court judge P. Devadass as the chairperson of the five-member Tamilnadu state Lokayukta.
- ❖ Tamilnadu Lokayukta is a 5 member body – A Chairman and two judicial and non-judicial members each.
- ❖ Former district judges K. Jayabalan and R. Krishnamoorthy are the two judicial members and retired IAS officer M. Rajaram and advocate K. Arumugam are the two non-judicial members of the anti-corruption body.
- ❖ The chairperson and the members shall hold office for five years from the day they enter office or the date on which they attain the age of 70 years, whichever is earlier.
- ❖ Complaints against a public functionary can be submitted to the Registrar or the designated officer in person or by post, but anonymous complaints would not be entertained by the panel.

Remotely Operated Vehicle

- ❖ An indigenous underwater Remotely Operated Vehicle (ROV) has been developed by National Institute of Ocean Technology (NIOT), Chennai.
- ❖ It has been given "National Meritorious Invention Award" by National Research Development Corporation (NRDC), under Ministry of Science and Technology.
- ❖ This ROV has helped Indian scientists to conduct climate change studies in the coral reefs of the Andamans, sea weeds in the Arabian Sea and also in Priyadharshini lake, Antarctica.



SMALL DIVE, BIG FEAT

CLOSE WATCH:
The underwater ROV studying coral reef in the Andamans

- National Institute of Ocean Technology (NIOT) has designed, tested and commissioned the ROV, which can operate in polar water and Open Ocean up to a 500-m depth
- Major sensors— **Scanning sonar, CTD-DO (Conductivity Temperature Depth-Dissolved Oxygen)**
- Equipped with **low-cost navigation, high definition imaging devices and communication system**
- ROV used for **climate change studies in Antarctica, monitor coral reef in the Andamans and monitoring seaweed in Arabian Sea, search support in Open Ocean environment for Indian ports and defence sectors**

Adichanallur

- ❖ Carbon dating of samples excavated from the Adichanallur site in Thoothukudi district has revealed that they belonged to the period between 905 BC and 696 BC.



- ❖ Carbon dating of artefacts was done in the Beta Analytic Testing Laboratory, USA.
- ❖ With the artefacts having Tamil inscriptions, this could prove that Tamil was older than Prakrit language, dated to be from 268 BC to 232 BC.

Temple Conservation

- ❖ The Hindu Religious and Charitable Endowments (HR&CE) department has prepared a manual for conservation of heritage temples across the state.



- ❖ Such a manual with a scientific approach is required to ensure that the structure of the temples is not weakened and their maintenance continues without modern additions.
- ❖ The HR & CE (Hindu Religious & Charitable Endowment) department oversees nearly 36,700 temples across Tamil Nadu.
- ❖ At least 50% of these temples are heritage structures that are more than 100 years old.

Kalingarayan Canal

- ❖ Dumping of garbage, including plastic and thermocol, industrial effluents and poultry waste continue to affect the 737-year-old Kalingarayan canal in Erode district.
- ❖ The 90.5 km. long canal helps in irrigating 15,743 acre located on both the sides of the canal from Bhavani to Kodumudi.



- ❖ Kalingarayan Canal was constructed by Kongu chieftain Kalingarayan in 1283.
- ❖ The canal's source is the Kalingarayan Dam near Bhavani, Erode.

- ❖ The canal connects Bhavani and Noyyal rivers, two major tributaries of the Kaveri.

Mercury Levels

- ❖ Institute for Ocean Management (IOM), Anna University has found that gaseous mercury levels in Chennai ranges between 3.5 nano gram/m³ to 8.5 nano gram/m³.
- ❖ Global average of gaseous mercury in atmosphere is 1.5 nano gram/m³.
- ❖ Apart from industrial pollution, proximity to the sea, which is a huge natural reserve of mercury, is suspected to be reason for high concentration of gaseous mercury in the city's air.
- ❖ Pollution levels are high between 3 AM and 8 AM and high in summer season than winter.

Health effects caused by short-term exposure to high levels of mercury vapors	Health effects caused by long-term exposure to mercury vapors
<ul style="list-style-type: none"> • Cough, sore throat • Shortness of breath • Chest pain • Nausea, vomiting, diarrhea • Increase in blood pressure or heart rate • A metallic taste in the mouth • Eye irritation • Headache • Vision problems 	<ul style="list-style-type: none"> • Anxiety • Excessive shyness • Anorexia • Sleeping problems • Loss of appetite • Irritability • Fatigue • Forgetfulness • Tremors • Changes in vision • Changes in hearing



Great Backyard Bird Count (GBBC)

- ❖ Tamil Nadu's Salem district submitted the largest number of checklists of birds (8,420) among all participating districts to the global Great Backyard Bird Count 2019.



- ❖ The Great Backyard Bird Count (GBBC) is an event to create a real-time snapshot of bird populations.

- ❖ Participants are asked to count birds for as little as 15 minutes (or as long as they wish) on any or all days of 4-day event and report their sightings online at birdcount.org.
- ❖ It was launched in 1998 by the Cornell Lab of Ornithology and National Audubon Society.
- ❖ GBBC is the first online citizen-science project to collect data on wild birds and to display results in near real-time
- ❖ The 22nd annual GBBC was held for four days from February 15 till February 18, 2019.

Drone Testing

- ❖ The DGCA (The Directorate General of Civil Aviation) has assigned Vellore, Salem, Coimbatore and Erode as the new test spots for drones under the RPAS scheme.
- ❖ The Requirements for Operation of Civil Remotely Piloted Aircraft System (RPAS) 2018, regulates and controls operation of the unmanned aerial vehicles (UAV) to ensure flight safety.



- ❖ It is mandatory for all drones to be registered with DGCA in the “Digital Sky” platform before commencement of operation.
- ❖ RPAS defines “No Drone Zones” around airports, near international border, Vijay Chowk in Delhi, State Secretariat Complex in State Capitals, strategic locations/vital and military installations.

Fishing Ban

- ❖ The annual 61-day fishing ban along the Tamil Nadu coast came into effect from 15th April in view of the breeding season.
- ❖ The ban was increased from 45 days to 60 days in 2017.
- ❖ Nearly 12,000 mechanised boats in 13 districts including Ramanathapuram, Tuticorin, Nagapattinam and Cuddalore among others in the state would stay off the sea during the period.

- ❖ The ban would not apply to country boats which would continue fishing as usual.
- ❖ Tamil Nadu has more than 1,076 km-long coastline and is one of the leading states in marine fish production.



TN Elections

- ❖ The 99 years old, only living member of the post-Independence Provisional Parliament T M Kalianna, cast his vote in Tiruchengode town in Namakkal constituency.
- ❖ Mr. Kalianna was the first parliamentarian from the integrated Salem district that comprised present-day Salem, Namakkal, Dharmapuri, and Krishnagiri districts.
- ❖ In Erode Lok Sabha constituency, 102-year-old K Arukkani exercised her right to franchise for the 18th time.

Elections 2019

- ❖ Tamil Nadu recorded an average voter turnout of 71.87 per cent in the elections held to 38 Lok Sabha seats.
- ❖ Over 2.05 crore men exercised their franchise, as against 2.11 crore women and 1,011 transpersons.
- ❖ Dharmapuri Parliamentary constituency recorded the highest turnout of 80.49 per cent.
- ❖ South Chennai Lok Sabha segment recorded the lowest turnout at 56.41 per cent.

- ❖ The three Parliamentary constituencies spread over the State capital witnessed the lowest of polling in the entire State.

Chennai North	63.47%
Chennai Central	59.25%
Chennai South	56.41%

Assembly Bypolls

- ❖ The average turnout stood at 75.57 per cent in the bypolls to the 18 Assembly seats.
- ❖ Among assembly constituencies Sholinghur recorded the highest with 82.26% followed by Harur with 82.08%.
- ❖ Perambur assembly constituency had the lowest turnout with 64.14%.

Vellore Polls

- ❖ Lok Sabha election to the Vellore parliamentary constituency was cancelled following the recovery of a huge amount of cash allegedly from a DMK candidate's office.
- ❖ Election Commission (EC) had made the recommendation for cancelling the polls to the President.
- ❖ EC cancelled the polls by exercising the powers conferred on it under
 - Article 324 of the Constitution
 - Section 21 of the General Clauses Act of 1897
 - Other enabling powers aimed at ensuring the conduct of free and fair elections.
- ❖ Vellore became the first Lok Sabha seat where elections have been cancelled over alleged use of money.

Rise in Sea Level

- ❖ According to a study by Geology department of Anna University, 1.5 sq. km of land along the Chennai coastline will be submerged by 2100.
- ❖ The sea would be moving closer to the land by 0.5 metres every year because of the increase in sea level.
- ❖ For the past 50 years, a 3.6mm rise in sea level a year has been reported in the Bay of Bengal.
- ❖ The rise in the Bay of Bengal appears to be higher than in other Asian regions.
- ❖ The increasing sea level would also force the water table along the coastline to move upwards.

- ❖ Sea water intrusion would replace the freshwater at the bottom of the aquifer.

Veeranam Lake

- ❖ Water released from Mettur Dam has reached Veeranam lake and it is brimming with water.
- ❖ Veeranam lake meets more than 35% of water requirement in Chennai city.
- ❖ The total capacity of the lake is 1,465 million cubic feet (mcft) of water.
- ❖ Everyday 6 mcft (180 million litres) is being drawn from the lake.
- ❖ The Chennai city's water requirement is 0.5 million cubic feet (mcft) per day.
- ❖ This water reaches the city through pipes passing through Villupuram and Kancheepuram districts.



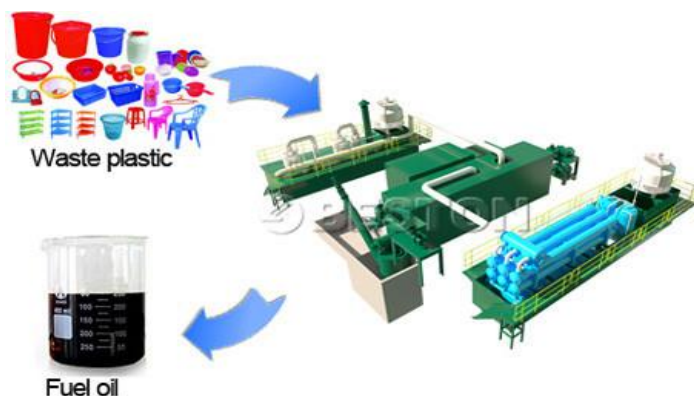
History

- ❖ Veeranam Lake was built in the Tenth Century during the time of Greater Cholas, from 907–955 AD.
- ❖ It was created by Rajaditya Chola.
- ❖ He named it after his father Parantaka I Chola, who had the title "Veeranarayanan".
- ❖ Veeranarayanan lake later came to be called as Veeranam Lake.
- ❖ Veeranam lake gets water from Kollidam via Vadavaru River and water released from Mettur Lower Anaicut.

Pyrolysis Plant

- ❖ The Greater Chennai Corporation (GCC) is planning to set up a pyrolysis plant to manage plastic waste and produce fuel from it.

- ❖ The GCC produces about 500 tonnes of plastic waste every day.



- ❖ The pyrolysis process breaks down the organic compounds in plastic under extremely high temperatures in the absence of oxygen and converts them into fuel.
- ❖ The fuel is sold for Rs 25-35 per litre and 2 kg of plastic waste is required to generate one litre of the fuel.
- ❖ The fuel can be used in cement, steel, glass, brick factories and also in boilers.
- ❖ It's also used in trucks, generator sets, steam ships and other vehicles.

Period. End of Sentence

- ❖ Social entrepreneur from Coimbatore Arunachalam Muruganantham figures in the list of World's 50 Greatest Leaders 2019 by Fortune Magazine.
- ❖ He is ranked 45th in the list released recently.
- ❖ "Period. End of Sentence" a documentary that reflects his work, had won an Oscar in the Best Short Documentary category this year.
- ❖ He is the inventor of a low-cost sanitary pad-making machine.
- ❖ He is credited for innovating grassroots mechanisms for generating awareness about traditional unhygienic practices around menstruation in rural India.

Circular Service

- ❖ Southern Railway has introduced the first circular suburban train service in Chennai division.
- ❖ It is the country's longest circular route covering 235.5km.
- ❖ Currently Kolkata suburban railway has 35 km circular route which was the longest in the country.



Thanjavur Inscriptions

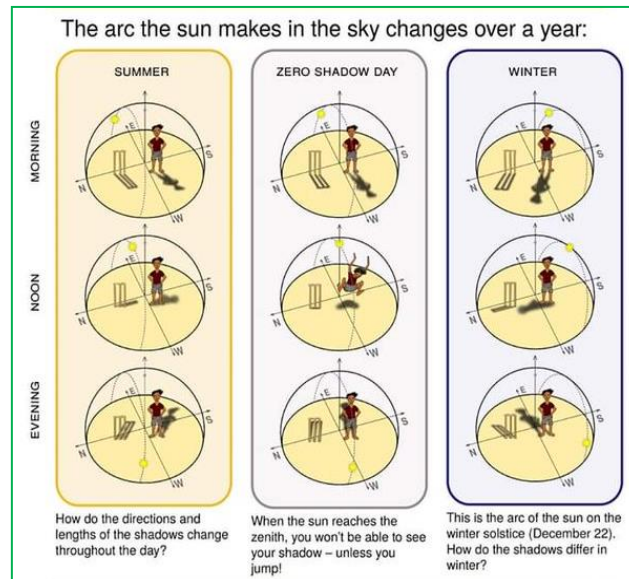
- ❖ Fake news has been spread that Tamil inscriptions in the Thanjavur Brihadeeswara temple are being replaced with Hindi inscriptions.
- ❖ In reality, the epigraphs were in Marathi, written in Devanagiri script which is common for Hindi.
- ❖ Please click the following link for more information
 - <https://www.tnpscthervupettagam.com/modi-script/>
- ❖ List of Epigraphs in Thanjavur Big temple

Emperor / Period	No of Inscriptions
Raja Raja Cholan	64
Rajendra Cholan	21
Rajajraja Cholan -II	1
Kulotunga Cholan - I	1
Kulotunga Cholan - III	1
Rajendra Cholan - III	1
Pandian Period	2
Vijayanagar Nayaks Period	4
Marati Rulers Period	4

Zero Shadow Day

- ❖ Chennai observed Zero Shadow Day on 25-04-19.
- ❖ On this day the sun will be exactly overhead.
- ❖ It will cast almost no shadow of objects on the ground.

- ❖ This happens two times a year.
- ❖ This is because the sun rays will hit the surface perpendicularly on the object.
- ❖ Therefore, the shadow of the object will be directly beneath it.



- ❖ It occurs at different times in different places around the world
- ❖ In India, it is usually observed in April and September.
- ❖ It occurs only at places located between Tropic of Cancer and Tropic of Capricorn.
- ❖ Therefore, Indian places like Delhi, Allahabad, Srinagar, located away from the Tropic of Cancer have no zero-shadow day.

Chronicler of Madras

- ❖ Heritage activist S. Muthiah, well known for his writings on the political and cultural history of Chennai city, recently passed away.
- ❖ Muthiah was the main brain behind the annual Madras Day celebrations held every year in Chennai city on August 22.
- ❖ He was awarded the Most Excellent Order of the British Empire in 2002 for his accomplishments.

Bharati Script

- ❖ A team of scientists at IIT Madras have developed a method for reading documents in Bharati script using a multi-lingual optical character recognition (OCR) scheme.

- ❖ Bharati is a unified script for nine Indian languages which is being proposed as a common script for India.
- ❖ Scripts integrated include
 - Tamil
 - Kannada
 - Telugu
 - Malayalam
 - Devanagri
 - Bengali
 - Oriya
 - Gujarathi
 - Gurmukhi
- ❖ The Roman script is used as a common script for many European languages (English, French, German, Italian etc.)
- ❖ Likewise, Bharti script aims to bring down the communication barriers in India with a common script.
- ❖ English and Urdu scripts have not been integrated in Bharti.

NATIONAL

Ballot Papers in Lok Sabha Election

- ❖ While the entire Country will vote in EVMs in the Lok Sabha Polls 2019, the people of the Nizamabad in Telangana will vote through Ballot Papers.
- ❖ For the Lok Sabha Polls 2019 in the Nizamabad Lok Sabha seat, there are 185 candidates in contention.
- ❖ As one EVM can accommodate only 16 candidates and a maximum of 4 EVMs can be used in one polling booth.
- ❖ So, the Election Commission is forced to switch back to the age-old practice of ballot papers.

Second joint logistics node of tri-services

- ❖ The second Joint Logistics Node (JLN) of tri-services has become operational at Naval base in Mumbai, Maharashtra.
- ❖ It will provide logistical support to all three defence services and improve utilisation of resources, manpower and remove duplication.

- ❖ The first JLN consisting of the three services was set up at Andaman and Nicobar Islands in 2018.
- ❖ The third logistic node is in process and is likely to come up in Guwahati, Assam and it will only be among Indian Army and Air Force.

SVEEP Workshop

- ❖ The Election commission of India has conducted SVEEP (Systematic Voters' Education and Electoral Participation program) workshop for 150 community Radios.
- ❖ The Main purpose of the workshop was training and capacity building of Community Radios for voter education and awareness.
- ❖ Community radio is a type of radio service that caters to the interests of a specific area, broadcasting material that has relevance to a local audience.
- ❖ Community radios are usually a short-range, not-for-profit ventures run using low-cost technology.

Mind the Gap

- ❖ Oxfam India has released a report titled 'Mind The Gap - State of Employment in India'.
- ❖ According to the report, lack of quality jobs and increasing wage disparity are key markers of inequality in the Indian labour market.
- ❖ The report highlights gender inequality in salary and wages paid and how women are systematically underpaid irrespective of the category of their employment.
- ❖ It states, based on NSSO Survey (National Sample Survey Organisation) data, on an average, women are paid 34 per cent less than similarly qualified male workers for performing the same tasks.

OXFAM

- ❖ Oxford Committee for Famine Relief – OxFam was a charitable organization founded in 1942 for the alleviation of global poverty.
- ❖ Oxfam is celebrating its 67th year of humanitarian service in India.
- ❖ In 1951, Oxfam Great Britain launched its first full scale humanitarian response to the Bihar famine.

Finalization of CCIT

- ❖ In the wake of growing threats and acts of terrorism across the world, India and Bolivia have called for an early finalization of Comprehensive Convention on International Terrorism (CCIT).
- ❖ The CCIT is a proposed treaty which intends to criminalize all forms of international terrorism and deny terrorists, their financiers and supporters' access to funds, arms, and safe havens.
- ❖ CCIT was proposed by India in 1996 but it is yet to be ratified and accepted fully by UN General Assembly.
- ❖ Except the convention on Terrorism, three other conventions have been universally accepted.

Name of the Convention	Year adopted
International Convention for the Suppression of Terrorist Bombings	1997
International Convention for the Suppression of the Financing of Terrorism	1999
International Convention for the Suppression of Acts of Nuclear Terrorism	2005

100th warship

- ❖ Garden Reach Shipbuilders & Engineers of Kolkata (GRSE) has emerged the first Indian shipyard to make and deliver 100 warships to the Indian Navy, Indian Coast Guard and Mauritius Coast Guard.
- ❖ The 100th Warship, IN LCU L-56, can accommodate 216 personnel and is equipped with two indigenous CRN 91 guns.

EMISAT

- ❖ India's launch vehicle PSLV-C45 blasted off from the ISRO spaceport, Satish Dhawan Space Centre, Sriharikota on April 01, 2019.
- ❖ The rocket carried an electronic intelligence satellite EMISAT for the Defence Research Development Organisation (DRDO) and 28 other third-party satellites.

Matiri Bridge

- ❖ The Indian Army has successfully built the longest suspension bridge over the Indus River - 'Matiri Bridge' in the Leh-Ladakh region of Kashmir.

- ❖ The 260-feet long suspension bridge was built by the combat engineers belonging to the Sahas aur Yogyata regiment of Indian Army's Fire & Fury Corps.

AUSINDEX-19

- ❖ The third edition of 'AUSINDEX-19' (Australia India Exercise), a bilateral maritime exercise between Indian Navy and Royal Australian Navy is being held at Visakhapatnam.
- ❖ This joint exercise emphasises on India's vision of SAGAR (Security and Growth for All in the Region) and shared objectives of the two countries towards ensuring good order in the maritime domain.

Event	Venue
AUSINDEX -2015	Vishakapatnam
AUSINDEX -2017	Freemantle, Australia
AUSINDEX - 2019	Vishakapatnam

Bolivian Lithium

- ❖ Bolivia has agreed to provide India with access to its lithium carbonate, and also facilitate joint ventures for lithium battery/cell production plants in India.
- ❖ Bolivia has one fourth of the world's total lithium reserves.
- ❖ The partnership will provide a major boost to India's ambitious e-mobility plans – the National Mission on Transformative Mobility and Battery Storage of India.
- ❖ India's objective to have at least 30% of its vehicles run on electric batteries by 2030 will be partially augmented by Bolivian Lithium.
- ❖ Bolivia, Argentina and Chile are together called the Lithium Triangle countries of South American continent.

Seahawk Helicopter

- ❖ The US has approved the sale of 24 multi-role MH-60 'Romeo' Seahawk helicopters to India.
- ❖ The Lockheed Martin company build helicopters are designed for anti-submarine warfare, anti-surface warfare, surveillance, communications relay, combat search and rescue, naval gunfire support and logistics support.

COMCASA

- ❖ The Communications Compatibility and Security Agreement (COMCASA) was signed in 2018 during India and USA 2 + 2 dialogue.
- ❖ It paves the way for transfer of communication security equipment from the US to India.
- ❖ Under this pact, the first-ever secure communication link between the Indian Naval Headquarters and the US Central as well as Pacific Naval Commands has been established.
- ❖ It enables India to,
 - Obtain critical defence technologies from the USA,
 - Gain access to critical communication network of the US armed forces and real-time American intelligence.

AFSPA in Arunachal

- ❖ The Ministry of Home Affairs (MHA) has issued orders for withdrawal of the controversial Armed Forces Special Powers Act (AFSPA) from 3 of the 9 districts in Arunachal Pradesh.
- ❖ AFSPA is declared in areas where armed forces are required to operate in aid to civil authorities.
- ❖ AFSPA is valid only in area which are declared “disturbed” either by the Central or the State government or the administrator of Union Territory under Section 3 of the Act.
- ❖ Arunachal Pradesh became a state on February 20, 1987, and since its inception, AFSPA was applied to the certain parts of the state.

AFSPA

- ❖ AFSPA act is modelled on the Armed Forces Special Powers Ordinance of 1942, promulgated by the British to suppress the Quit India Movement.
- ❖ Armed Forces (Special Powers) Acts (AFSPA), are Acts of the Parliament of India that grant special powers to the Indian Armed Forces to act in specific areas that are termed as "disturbed areas".
- ❖ The AFSPA Acts are

REGION	STATUS
Armed Forces Special Powers (Assam and Manipur) Act, 1958 (Extended to all 7 North East states later)	Tripura, Meghalaya – Withdrawn Rest of the States - Partially Withdrawn

The Armed Forces (Punjab and Chandigarh) Special Powers Act, 1983	Withdrawn in 1997
The Armed Forces (Jammu and Kashmir) Special Powers Act, 1990	Active

Transport Infra

- ❖ The National Investment and Infrastructure Fund (NIIF) and Roadis, a private investor and operator of transport infrastructure worldwide and have jointly set up a platform to invest 2 billion dollars in road projects in India.
- ❖ NIIF is India's first sovereign wealth fund that was set up by the Government of India in 2015.
- ❖ The objective behind creating this fund was to maximize economic impact mainly through infrastructure investment in commercially viable projects, both Greenfield and Brownfield.
- ❖ Capital for NIIF is raised from both domestic and international institutional investors.

Standardisation and Conformity Assessment

- ❖ The Bureau of Indian Standards (BIS) has inked an MoU with the Indian Institute of Technology, Delhi (IIT-D) to collaborate in the field of standardisation and conformity assessment.
- ❖ IIT Delhi is expected to provide infrastructure support for research and development projects of relevance to standardisation and BIS will provide financial support to IIT Delhi for projects.
- ❖ BIS is the National Standards Body of India established under the BIS Act, 2016. Surina Rajan is the Director General of BIS.



FAME 2

- ❖ FAME 2 (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles) scheme excludes electric vehicles run on lead-acid batteries and allows subsidy only for vehicles run on advanced batteries.
- ❖ The second phase of FAME scheme or FAME 2 is implemented from April 1, 2019 and it extends to March 31, 2022.



- ❖ FAME India was started in 2015 as a part of the National Electric Mobility Mission Plan.
- ❖ The Main objective of the scheme is to boost electric mobility and increase the number of electric vehicles in commercial fleets by providing subsidies.
- ❖ FAME focuses on 4 areas i.e. Technology development, Demand Creation, Pilot Projects and Charging Infrastructure.

ITBP Votes

- ❖ The soldiers of Indo-Tibetan Border Police (ITBP) were the first to cast their vote for the 2019 Lok Sabha elections in Arunachal Pradesh as Service Voters.
- ❖ The first vote of the country was cast by DIG Sudhakar Natarajan, head of ATS ITBP.
- ❖ Service voters belonging to defence and paramilitary forces have the option of either voting through postal ballot or through a proxy voter duly appointed by him/her.

Service Voters

- ❖ A wife of a service voter will be enrolled as a service voter but not a son or daughter.
- ❖ The following category of people are deemed to be service voters.

Member of Armed Forces

Member of Assam Rifles, CRPF, BSF, ITBF, GREF in Border Roads Organization and Central Industrial Security Force.

Employed by the Government of India in a post outside India.

Member of an armed police force of a state, and serving outside that state.

Uncertified Advertisements

- ❖ The Election Commission of India (ECI) has prohibited political advertisements on polling day and a day prior to it unless they are pre-certified by screening committees.
- ❖ Media Certification and Monitoring Committee at the state and district level are to examine and pre-certify all such advertisements.
- ❖ At present, electronic media is barred from showing election publicity material during the last 48 hours before the conclusion of polling.

Greenery and Landscaping

- ❖ National Seminar on “Greenery and Landscaping” was organized by the Central Public Works Department (CPWD).
- ❖ The seminar focused on Green Urban Areas which play an important role in the social and natural sustainability and improve quality of life.
- ❖ Green Urban Areas refer to green spaces such as parks and sports fields as well as woods and natural meadows, wetlands or other urban ecosystems.

NIRF Rankings

- ❖ President Ram Nath Kovind has released the National Institutional Ranking Framework (NIRF) Rankings 2019 for Institutes and Universities.
- ❖ NIRF was approved and launched by Minister of Human Resource Development on 29th September 2015.
- ❖ The First rank list was released in 2016.
- ❖ The parameters of ranking broadly cover Teaching, Learning and Resources, Research and Professional Practices, Graduation Outcomes, Outreach and Inclusivity and Perception.
- ❖ The Indian Institute of Technology (IIT), Madras, topped the overall national ranking of higher institutes.

CATEGORY	TOP INSTITUTE/ UNIVERSITY
Overall	IIT Madras
Engineering	IIT Madras
Law	National Law School of India University, Bengaluru
Architecture	IIT Kharagpur
Medical Institutes	AIIMS New Delhi
Colleges	Miranda House
Pharmacy	Jamia Hamdard
Indian Management institutes	IIM Bangalore
Universities	IISc Bangalore

- ❖ Various Tamilnadu based colleges have made it to the top rankings.

Category	Name	Rank
COLLEGES	Presidency College	3
	Loyola College	6
UNIVERSITY	Anna University	7
	Amrita Viswa Peedam	8
ENGINEERING	IIT Madras	1
	Anna University	9
	NIT Trichy	10
PHARMACY	JSS College, Nilgiris	10
ARCHITECTURE	NIT Trichy	7
	Anna University	12
MEDICINE	CMC, Vellore	3
	Amrita Viswa Peedam	5
	JIPMER, Pondicherry	8
	SRMC, Chennai	11
MANAGEMENT	IIM, Trichy	14
OVERALL	IIT Madras	1

ARIIA

- ❖ The Atal Ranking of Institutions on Innovation Achievements (ARIIA) under the NIRF was introduced this year (2019) for the first time.
- ❖ ARIIA rankings for Institutions and Universities in India are exclusively given on indicators related to “Innovation and Entrepreneurship Development” among students and faculty.

- ❖ IIT Madras was the number 1 ranked institute under ARIIA.

VVPAT verification

- ❖ The Supreme Court has increased Voter Verified Paper Audit Trail (VVPAT) verification to five random Electronic Voting Machines (EVMs) in each Assembly segment/constituency.



- ❖ Under the earlier guidelines of Election Commission of India (ECI), the VVPAT slips from only one EVM in every Assembly segment/constituency was subjected to physical verification.
- ❖ ECI's sample verification for the April-May Lok Sabha polls would cover 4,125 EVMs and VVPATs.

VVPAT

- ❖ Voter-verified paper audit trail (VVPAT) is a device which dispenses a slip with the symbol of the party for which a person has voted for.
- ❖ The slip appears on a small window for seven seconds and then drops in a box. The voter cannot take it home.
- ❖ VVPAT displays candidate's serial number, Name of the candidate and Corresponding symbol for whom the vote has been cast.

Bold Kurukshetra 2019

- ❖ The 12th edition of India-Singapore joint military exercise, 'Bold Kurukshetra 2019' began at Babina Cantonment, Jhansi, Uttar Pradesh.
- ❖ The three-day exercise is being conducted to develop military technology, boost maritime security and bolster the fight against terrorism.
- ❖ The two countries had signed a cooperation agreement to strengthen the defence ties between Indian Military and Singapore Armed Forces in November 2017.

Jurisdiction No bar

- ❖ Supreme court has ruled that a woman, who is forced to leave her matrimonial home due to dowry harassment or cruelty can file a case against her husband and in-laws, right from the place where she resides thereafter.
- ❖ She can initiate criminal proceedings under Section 498-A of the Indian Penal Code without any jurisdictional constraints.
- ❖ Section 177 of the Code of Criminal Procedure (CrPC) had made it compulsory that a criminal case shall be filed and the trial should be conducted in courts which had jurisdiction over where a crime occurred.
- ❖ This important judgement was delivered in the Rupali Devi vs State of Uttar Pradesh and others.

Battle of Kangla Tongbi

- ❖ The Platinum Jubilee of the Battle of Kangla Tongbi War was commemorated on 7th April 2019 by Army Ordnance Corps at Kangla Tongbi War Memorial near Imphal.
- ❖ It is considered one of the fiercest battles of World War II.
- ❖ It was fought by ordnance personnel of 221 Advance Ordnance Depot (AOD) on the night of 6/7 April 1944 against Japanese forces.



- ❖ This battle was one of the turning points of the Japan's Burma Campaign, part of the South-East Asian Theatre of the Second World War.
- ❖ The Battle of Kohima was simultaneously fought alongside this battle. Japan faced one of its largest defeats in both the battles.

Domkhar Rock Art Sanctuary

- ❖ The sanctuary is located at Domkhar village in Leh of Kashmir, next to the banks of Indus River. It has 500-odd petroglyphs.
- ❖ It has numerous rocks carved figures, thought to date back between 2000 and 4000 years.
- ❖ This was established in 2012 by the efforts of Stanzin Thangjuk, a farmer who has been instrumental in single-handedly protecting these pre-historic rock carvings.



- ❖ Petroglyphs are images created by removing part of a rock surface by incising, picking, carving, or abrading, as a form of rock art.
- ❖ Recently it was in news due to its damaged conditions.

Modi Biopic banned

- ❖ The Election Commission of India has banned the screening of the biopic on Prime Minister Narendra Modi (Name of the Movie - PM Narendra Modi) during poll period.
- ❖ It has stated that any such film that promotes the purpose of any political entity or any individual should not be displayed in the electronic media.

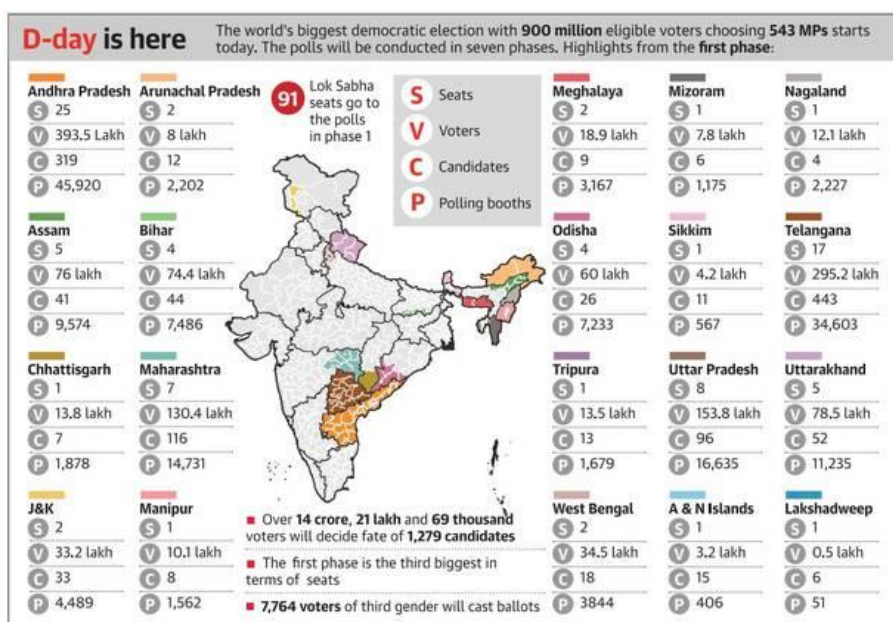
PM deeply regrets

- ❖ British Prime Minister Theresa May has expressed “regret” in Parliament for the Jallianwala Bagh massacre, ahead of the 100th anniversary of the killings on April 13.

- ❖ May quoted Queen Elizabeth’s remarks, calling the incident a “distressing example” of Britain’s past history with India.
- ❖ But the Opposition Labour Party headed by Jeremy Corbyn, has called for a “full, clear and unequivocal apology”, from the British government for the Jallianwala Bagh massacre.

First phase polling

- ❖ Voting in the Phase 1 of Parliamentary elections has begun on April 11th, 2019. The 7th and final phase of elections will be held on May 19, 2019.



- ❖ Polling will take place for a total of 91 seats in 20 states and Union Territories, including Andhra Pradesh (25), Telangana (17), Uttarakhand (5), Meghalaya (2) and Arunachal Pradesh (2).

School Children’s Health

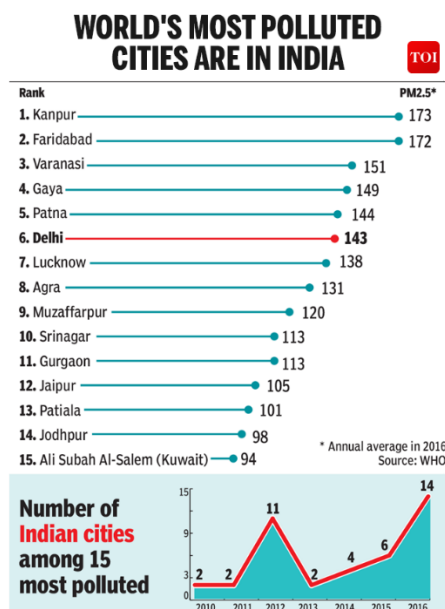
- ❖ Jarma Wellness, an organisation working in the area of healthcare consultation has conducted a health survey amongst 2 lakh school going children from various socio-economic background.
- ❖ It has released a report titled ‘Enhancing the Effectiveness and Impact of Schools: Insights from School Health Screening Program’.

Key Findings

- ❖ Obesity, vision and dental issues are the major health problems faced by school-going children in the age group 2 to 17 years across India.
- ❖ 30.4% of students have abnormal BMI (Body Mass Index) and one in two students may need spectacles.

Indian Cities and Air Pollution

- ❖ The Environment group Climate Trends has released a report titled ‘Political Leaders Position and Action on Air Quality in India 2014-2019’ to highlight the dangerous Air Pollution levels at the Indian cities.



- ❖ It states that that the Varanasi, Prime Minister Narendra Modi’s Lok Sabha constituency, is ranked third on the WHO’s list of 15 most polluted cities.
- ❖ It reports that the situation in Varanasi is “deteriorating” as the Government has focused only on its beautification and infrastructure.
- ❖ Varanasi is witnessing a rise in the number of people suffering from allergies and respiratory problems due to a “lot” of uncontrolled construction in the city.
- ❖ The Air Quality Index (AQI) in Varanasi reached an alarming 490 in 2017 and 384 — very poor category — in December 2018.

Air Quality Index	Status
0 – 50	Good
51 – 100	Satisfactory
101 – 200	Moderate
201 – 300	Poor
301 – 400	Very Poor
401 – 500	Severe

- ❖ The report claimed MPs of Lucknow and Kanpur have mostly been silent on the issue of air pollution in their respective constituencies.
- ❖ Home Minister Rajnath Singh and senior BJP leader Murli Manohar Joshi are MPs of the two constituencies respectively.

Veer Parivar App

- ❖ On the occasion of the 54th Valour Day of the Central Reserve Police Force (April 9) President Ram Nath Kovind launched 'Veer Parivar App.
- ❖ It is a mobile application for families of CRPF personnel killed in the line of duty.
- ❖ The Veer Parivar App will be installed securely on the phones of the slain personnel families and will not be available in the app stores.
- ❖ The app will provide real-time assistance to the families of the martyred CRPF personnel with regard to issuance of ex gratia, pension benefits etc.

Development assistance

- ❖ India has built a 25-bed maternity hospital, known as Chandra Narayan Yadav Memorial Maternity Hospital, in Nepal.
- ❖ The hospital has been built under the Government of India's Small Development Projects (SDP) scheme.
- ❖ SDPs constitute an active pillar of India's development assistance to neighbouring countries such as Afghanistan, Nepal, Bhutan, Bangladesh, Myanmar.
- ❖ Development assistance is a key instrument in India's foreign policy.

RailWire Wi-Fi

- ❖ The Santacruz railway station in Mumbai became the 1600th station to become a RailWire Wi-Fi zone.
- ❖ RailWire is a retail Broadband initiative of the RailTel.
- ❖ RailTel has already provided high-speed Wi-Fi at 985 stations.
- ❖ RailTel Corporation of India Ltd is a Miniratna public sector enterprise of Government of India.
- ❖ It is one of the largest neutral telecom infrastructure providers in the country.

Article 324

- ❖ The Election Commission of India, by invoking powers under Article 324, has stalled the release of three political biopics until the completion of the Lok Sabha election process.

Movie	Personality
Udyama Simham	K Chandrasekar Rao
Lakshmi's NTR	NT Rama Rao
PM Narendra Modi	Narendra Modi

- ❖ Under Article 324 of the Constitution, superintendence and control of elections are bestowed upon the Commission and it is its duty to take necessary measures to create a level playing field for all candidates.
- ❖ In People's Union for Civil Liberties vs Union of India and others 2013 case, Supreme Court has held that Free and fair elections is a part of the "basic structure" of the Indian Constitution.

Supreme Court on Rafale

- ❖ The SC dismissed arguments that several secret documents about the Rafale deal could not be examined by the court because they had been "stolen".
- ❖ In 2015 PM Modi decided to drop ongoing negotiations with French manufacturer Dassault to buy 136 Rafale fighter jets despite years of technical discussions and negotiations.
- ❖ He had announced a new government-to-government deal to buy just 36 Rafale jets only on completely different terms from the earlier ones.
- ❖ Several petitioners demanded Supreme Court to investigate into the deal, but the court in 2018 chose not to intervene and dismissed the petitions.
- ❖ In 2019, The Hindu's N Ram published reports based on actual file noting and reports made by defence ministry officials. They were
 - Defence ministry's negotiation team had complained about the separate negotiation carried out by PM's Office on its own with Dassault.
 - The separate discussions weakened India's position and denied a better deal.
 - The French were permitted to drop clauses that are otherwise standard for India such as requiring bank guarantees and anti-corruption measures.

- ❖ The petitioners whose case was dismissed in 2018, took these documents back to the Supreme Court and had filed a review petition based on The Hindu's documents.
- ❖ The government of India objected to the investigation on the grounds that these documents were stolen and photo copied and any further investigation into the Rafale deal would endanger the National security.
- ❖ The court dismissed the arguments altogether and admitted Review of the case and verified the authenticity and admissibility of the evidence released by The Hindu.

Pharmacovigilance Programme

- ❖ The National Co-ordination Centre of the Pharmacovigilance Programme of India (PvPI) has raised an alert on adverse reactions that were being reported from 7 commonly-used antibiotics.
- ❖ The 7 Antibiotics are

Cefotaxime	Ofloxacin
Cefixime	Tranexamic Acid
Quetiapine	Sulfasalazine
Sodium Valproate	

- ❖ Central Drugs Standard Control Organisation (CDSCO) has instructed drug manufacturers to add leaflets inserted into drug packets or on promotional literature to inform people about the adverse reactions of these medicines.
- ❖ PvPI functions as the drug watchdog under the Union Health Ministry.

Lateral Entry

- ❖ In a historic move, the Union Public Service Commission (UPSC) has appointed 9 private sector specialists as joint secretaries in central government departments.

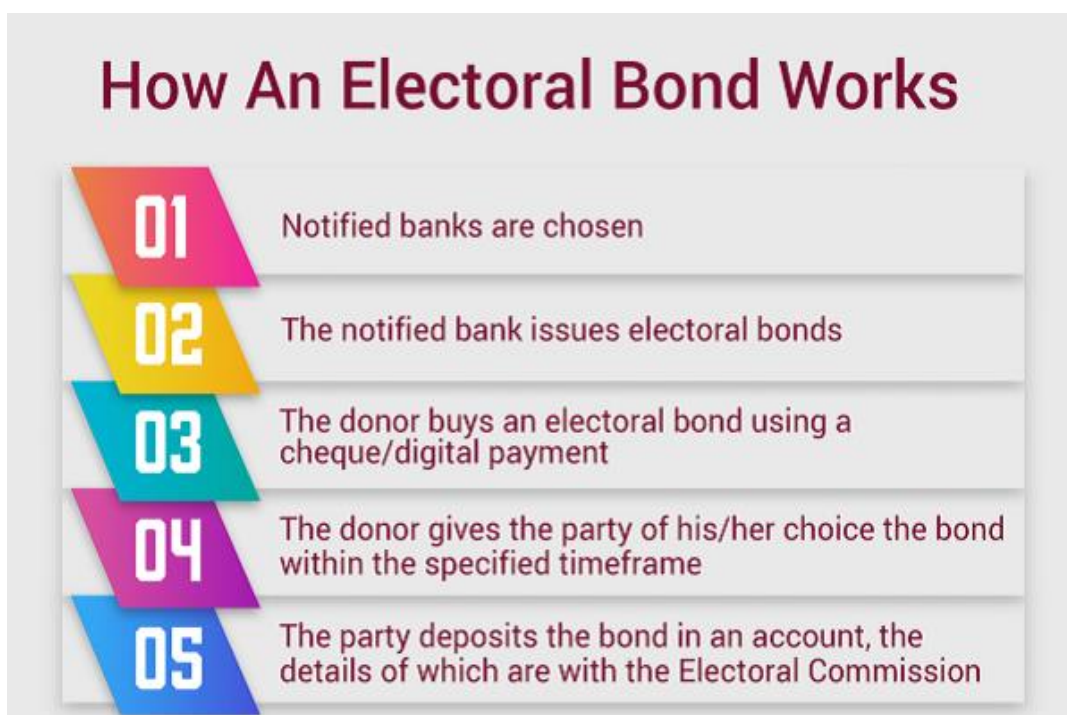
Name	Department
Kakoli Ghosh	Agriculture, Co-operation and Farmers Welfare
Amber Dubey	Civil Aviation
Arun Goel	Commerce
Rajeev Saksena	Economic Affairs
Sujit Kumar Bajpayee	Environment, Forest and Climate Change

Saurabh Mishra	Financial Services
Dinesh Dayanand Jagdale	New and Renewable Energy
Suman Prasad Singh	Road Transport and Highways
Bhushan Kumar	Shipping

- ❖ Notable Non-IAS officers who had served as Secretaries include Vijay Kelkar who served as Finance secretary and Montek Singh Ahluwalia who was India's commerce and finance secretary.

Electoral Bond Scheme

- ❖ The Supreme Court has directed all political parties to furnish details about the receipts of electoral bonds in a sealed cover to the Election Commission.
- ❖ To know more about electoral bonds pls go here <https://www.tnpscthervupettagam.com/sbi-to-issue-and-encash-electoral-bonds/>



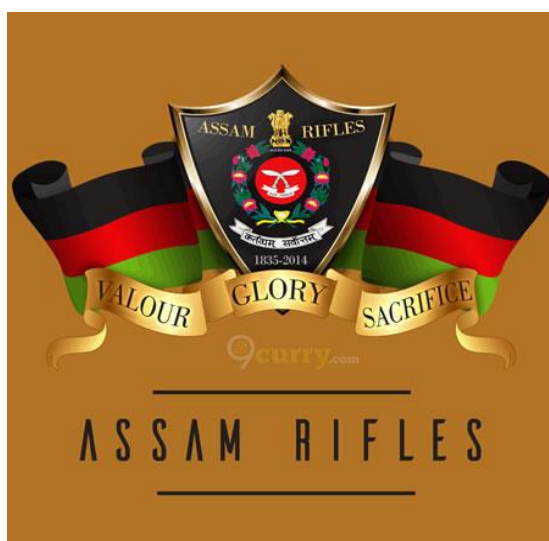
Loopholes

- ❖ Electoral bonds are prone to misuse because of the lack of disclosure requirements for individuals purchasing electoral bonds.
- ❖ Electoral bonds make election funding even more opaque. It will bring more and more black money into the political system.
- ❖ They can be used as a legal channel for companies to round-trip their black money saved in tax haven countries to a political party.

- ❖ Electoral bonds eliminate the maximum 7.5% cap on company donations, which means even loss-making companies can make unlimited donations.

Assam Rifles

- ❖ Assam Rifles which is also referred to as the “Sentinels of North East” is the oldest paramilitary force of India.
- ❖ It was formed by the British as a paramilitary force in 1835 known as “Cachar Levy”.
- ❖ The first non-British Director General (DG) of Assam Rifles was Col. Sidhiman Rai, MC.



- ❖ The Government of India (Allocation of Business) Rules, 1961 placed Assam Rifles under the head ‘Police’ while the objective and functions of Assam Rifles were that of military and paramilitary force.
- ❖ As an anomaly, the administrative control of Assam Rifles lies with the Home Ministry, while the operational control is with the Defence Ministry.
- ❖ All India Assam Rifles Ex-Servicemen Welfare Association have filed a case in Delhi High court to put an end to the dual control.

World’s Largest Aircraft

- ❖ The world’s largest aircraft, developed by an aerospace venture Stratolaunch, has successfully completed its first flight test.

WORLD'S LARGEST PLANE TAKES FLIGHT

The gigantic, six-engined mega jet with the wingspan of an American football field made its first test flight over the Mojave desert in California on Saturday. Built by Stratolaunch, the company set up by late Microsoft co-founder Paul Allen in 2011, it is designed to act as a flying launch pad for satellites. The test flight lasted for **2-and-a-half hours** and touched top speed of **304kmph**. It reached altitude of **17,000ft**

VITAL STATISTICS

- LENGTH **238 feet**
- WEIGHT **Half a million pounds**
- COCKPITS **2**
- FUSELAGES **2** (but only one is used to fly the plane)
- POWERED BY **6 Boeing 747 engines**
- WINGSPAN **385 feet** about 1.5 times that of an Airbus A380
- LANDING GEAR HAS **28 wheels**

HOW WILL IT WORK

- 1 Jet – carrying a rocket loaded with a satellite – will take off to 35,000 feet
- 2 Launch rocket from the plane on a trajectory toward space
- 3 Plane will land safely back at Mojave
- 4 Rocket deploys satellite before eventually falling back to Earth, burning up like a meteor

WHY IS IT IMPORTANT

- Designed to carry into space a rocket that would in turn deploy satellites
- Aims to offer military and even Nasa an economical way to get into space

WHY IS IT ECONOMICAL

- Made of carbon fiber, not aluminum, to make it light
- Only requires a runway for takeoff and no pricey equipment needed for traditional rocket launch
- Burns less fuel
- Can take off and fly in bad weather too
- Launches can be done more frequently

British billionaire Richard Branson's company Virgin Galactic has also developed aircraft that launch rockets into orbit from great height

- ❖ Stratolaunch was founded by the Microsoft co-founder Paul Allen in 2011
- ❖ The Aircraft achieved a maximum speed of 189 miles (302.4 km) per hour.
- ❖ The plane flew for 2.5 hours over the Mojave Desert, California at altitudes up to 17,000 feet.

IMD Monsoon Forecast

- ❖ While releasing its monsoon forecast, the India Meteorological Department (IMD) expressed the projected rainfall in terms of Long Period Average (LPA), saying that it was expected to be 96% of LPA.
- ❖ 96% of LPA indicates below normal rainfall.
- ❖ For further reading please go here:
 - <https://www.tnpscthervupettagam.com/monsoon-prediction/>

NIRBHAY

- ❖ DRDO has successfully test fired sub-sonic cruise missile “Nirbhay” from the Integrated Test Range (ITR), Chandipur Odisha.
- ❖ It is a Long Range Sub-Sonic Cruise Missile, which can be deployed from multiple platforms.
- ❖ Nirbhay missile has blended missile and aeronautical technologies which allows it to take off vertically like missile and cruise horizontally like an aircraft.
- ❖ It is capable of loitering and cruising at Mach 0.7 (sub-sonic) at altitude as low as 100 meters. It can carry nuclear warhead.



- ❖ A loitering missile can roam around the target area for some time, search for targets and then attack once the target is located.
- ❖ The guidance, control and navigation system of missile is configured around indigenously designed Ring Laser Gyroscope (RLG) and MEMS-based Inertial Navigation System (INS) along with GPS system.

Poll Code Violation

- ❖ The Election Commission of India (ECI) has ordered a temporary ban on the following leaders from campaigning for poll code violations on 15th April.

Offender	Time Period
UP CM Yogi Adityanath	72 hours
Mayawati	48 hours
Union Minister Maneka Gandhi	48 hours
Azam Khan, Samajwadi Party	72 hours

- ❖ In a separate order, Election Commission of India (ECI), reprimanded Mayawati for the violation of Section 123 (corrupt practices) of the Representation of the People Act.
- ❖ If a candidate or her agent is inducing to vote or Not vote based on the grounds of race, religion, caste, community it is defined as a “corrupt practice” under Section 123.

Indo-Pacific Wing

- ❖ The Ministry of External Affairs has set up an Indo-Pacific division by merging its three earlier divisions.

DIVISION	FOCUS
QUAD DIVISION	India's joint maritime strategy with Australia, Japan and the US
ASEAN	Issues concerning the 10 Member countries of South-East Asian grouping
IORA (INDIAN OCEAN RIM ASSOCIATION)	2 dozen odd Indian Ocean Littoral countries with the marked exception of Pakistan and China.

- ❖ This is in sync with the Indo-Pacific policy articulated by PM Narendra Modi at the Shangri-La Dialogue in 2018.



- ❖ India considers the maritime arc from the Straits of Hormuz to the Straits of Malacca as its zone of influence.
- ❖ By this move India aims to extend its influence into the Western Pacific region.
- ❖ The US has also recently renamed its Pacific Command to the “Indo-Pacific Command” as it seeks to give teeth to its Indo-Pacific policy.

SEA VIGIL

- ❖ Exercise SEA VIGIL, a first of its kind Indian Navy initiative, was undertaken along the entire 7516.6 km coastline and Exclusive Economic Zone of India.
- ❖ For more details please go here:
 - <https://www.tnpscthervupettagam.com/exercise-sea-vigil/>
- ❖ The debrief of Exercise Sea Vigil was held on 16 Apr 19.
- ❖ It was chaired by Vice Admiral M.S.Pawar who highlighted the significant achievements during the exercise.

World Press Freedom Index 2019

- ❖ India ranked 140th out of 180 countries in the World Press Freedom Index 2019.

- ❖ The report is released by Reporters Without Borders.
- ❖ The index is topped by Norway.
- ❖ The Paris-based Reporters Without Borders is a non-profit organisation that works to document and combat attacks on journalists around the world.

Renewable Energy Certificates

- ❖ Renewable Energy (RE) companies have moved the Delhi High Court, seeking an exemption for Renewable Energy Certificates (RECs) under the GST.
- ❖ REC is a policy instrument to catalyze the development of renewable energy.
- ❖ It was introduced to increase the total renewable power generation under
 - The Electricity Act, 2003.
 - National Action Plan on Climate Change (NAPCC), 2008

Modi Script

- ❖ A stone inscription in Modi script belonging to the period of the Maratha ruler of Thanjavur has been discovered at the Somanathar temple in Thanjavur district.
- ❖ Modi is a script used to write the Marathi language primarily spoken in Maharashtra.



- ❖ The inscription recorded the donations made by Prathaba Simhan (A.D. 1753) to the temple.

Dial 112

- ❖ Twenty states and Union territories have joined in a pan-India network of single emergency helpline number 112.

- ❖ The Emergency Response Support System (ERSS) envisages a single pan-India emergency number '112', to target all types of emergencies.
- ❖ The '112' helpline is an integration of police (100), fire (101) and women (1090) helpline numbers

Women Safety

- ❖ To ensure safety of women, an exclusive feature called SHOUT feature has been introduced in '112 India' mobile app.
- ❖ Using SHOUT, women can get immediate assistance from
 - Registered volunteers in the vicinity
 - Emergency Response Centre (ERCs).
- ❖ The project is being implemented under Nirbhaya Fund
- ❖ Nirbhaya fund is exclusively set up for projects designed to improve the safety and security of women.

INS Imphal

- ❖ The Indian Navy launched guided missile destroyer Imphal at Mazagon Dock Shipbuilders in Mumbai.
- ❖ It is the first warship to be christened after a city in the north-east.
- ❖ Imphal is the third ship after Visakhapatnam and Mormugao to be launched under a 'Project-15B'.
- ❖ It has been designed indigenously by the Navy's Directorate of Naval Design and is built at Mazagon Dock Shipbuilders.
- ❖ The naming tradition of Indian Naval ships

Type of Ship	Named After	Example
Destroyers	State Capital or Big City	INS Delhi, INS Chennai
Smaller Frigates	Mountain ranges, Rivers or Weapons	INS Shivalik, INS Trishul
Corvettes	Small personal weapons	INS Kirpan, INS Khanjar

Sky Track

- ❖ The Airports Authority of India (AAI) has tied up with American company Aireon which provides space-based global air traffic surveillance system.
- ❖ Indian air traffic controllers (ATC) get only a rough idea of position of aircraft when it flies over the oceans.
- ❖ The tie up will enable India to track exact location of the planes even over ocean.

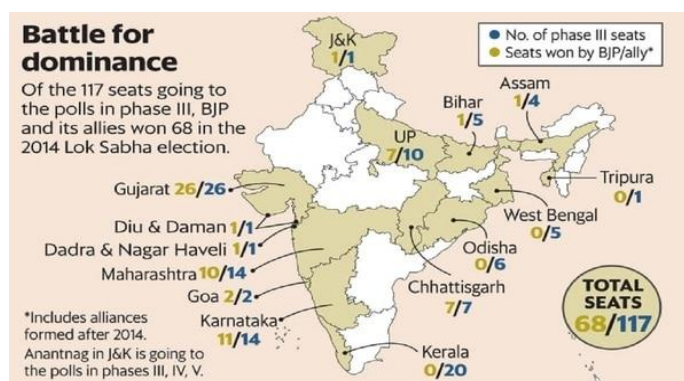
Coast Guard patrol ship-Veera

- ❖ Indian Coast Guard vessel Veera has been commissioned by General Bipin Rawat at Eastern Naval Command in Vishakhapatnam, Andhra Pradesh.
- ❖ Veera, the third in the series of the new generation Offshore Patrol Vessel (OPV) is indigenously designed and built by Larsen & Toubro Ltd.



Largest Poll Phase

- ❖ The third and the largest phase of Lok Sabha election in 116 seats is held on April 23.
- ❖ All constituencies in Gujarat and Kerala go for polls.



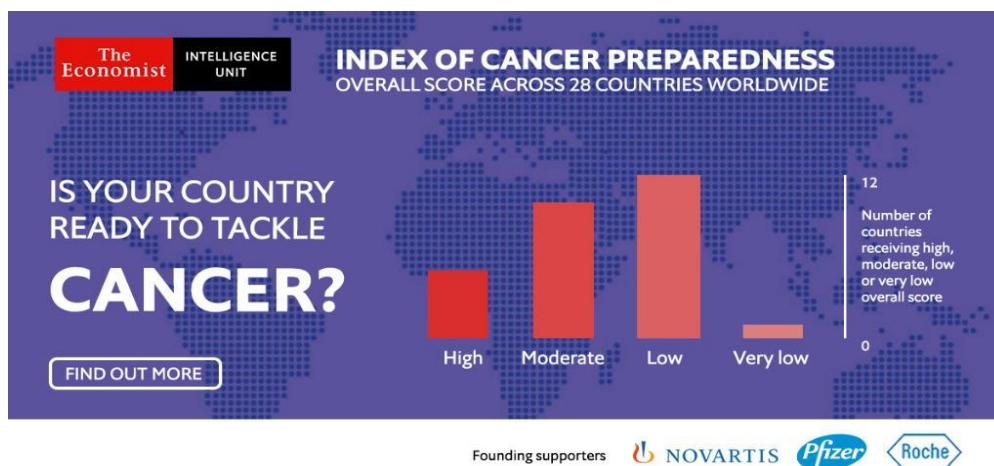
- ❖ Rahul Gandhi contests from Kerala's Wayanad constituency.
- ❖ Anantnag constituency in Jammu & Kashmir would be going to polls in 3 parts in Phase III, Phase IV and Phase V.
- ❖ It is the only such parliamentary constituency in the country.

3100 Medical Kits

- ❖ The Union Ministry of Home Affairs has distributed over 3,100 Sexual Assault Evidence Collection Kits (SAECK) among the States and Union Territories.
- ❖ This is also known as 'Rape Investigation Kits'.
- ❖ Using these, police can collect blood samples, semen samples and other evidence to carry out an immediate medico-legal investigation.
- ❖ The SAECKs were procured with financial support under the central government's women welfare specific 'Nirbhaya Fund'.

Cancer Preparedness

- ❖ India is ranked at 19 out of 28 countries in the Index of Cancer Preparedness (ICP) released by the Economist Intelligence Unit (EIU).



- ❖ ICP has been introduced as part of the report titled “Cancer preparedness around the world: National readiness for a global epidemic.”
- ❖ The ICP explores the issue of cancer preparedness through three broad domains
 - Policy and Planning
 - Care delivery
 - Health systems and Governance

Unique properties - Ganga

- ❖ Union Water Resources Ministry commissioned a study to find unique properties of Ganga.
- ❖ The Nagpur based NEERI team assessed the water quality in the Bhagirathi and the Ganga at 20 sampling stations.

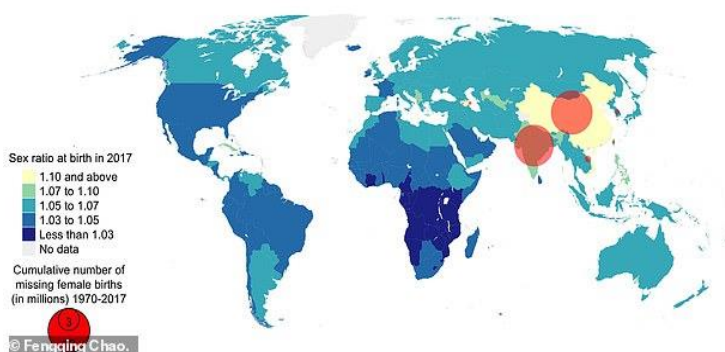
- ❖ It was done on “radiological, microbiological and biological” parameters.
- ❖ Ganga had three times more bacteriophages than bacterial isolates.
- ❖ Bacteriophages are a kind of virus that kill bacteria.
- ❖ They are typically harmless not only to the host organism but also to other beneficial bacteria.

National Environmental Engineering Research Institute (NEERI)

- ❖ It was set up in 1958 with a major focus on water supply, sewage disposal, communicable diseases.
- ❖ NEERI is a pioneer laboratory in the field of environmental science and engineering.

Female Infanticide

- ❖ A study on the world population trends was conducted by a team of researchers in Singapore.
- ❖ The report was published in the Proceedings of the National Academy of Sciences.
- ❖ It finds that the world could be missing at least 23 million girls because of sex-selective abortions.
- ❖ The majority of the missing girls are from China and India.
- ❖ Approximately 10.6 million of these so-called 'missing females' are in India and 11.9 million are from China.
- ❖ China's One Family One child policy and preference for male babies severely compounded the problem.



Democracy Index 2018

- ❖ The Economist Intelligence Unit (EIU) has released a report named “Democracy Index 2018: Me too? Political participation, protest and Democracy.”

- ❖ This is the 11th edition of the Democracy Index, which began in 2006.
- ❖ The report has kept India in the category of Flawed Democracy.
- ❖ Countries are categorised as
 - Full democracy
 - Flawed democracy
 - Hybrid regime
 - Authoritarian regime

Dentists and General Physicians

- ❖ Niti Ayog has agreed to the proposal of the Dental Council of India to allow dentists to practice as general physicians after a bridge course.
- ❖ This plan is to address the shortage of doctors in the country, particularly in rural areas.
- ❖ A bridge course of 3 years post Bachelor of Dental Science (BDS) is recommended.
- ❖ The syllabus curriculum, scheme of examination, method of evaluation, degrees and registration all these criteria will be the same as recommended for MBBS.

Ahimsa Mutton

- ❖ Hyderabad-based Centre for Cellular and Molecular Biology (CCMB) and National Research Centre on Meat (NRCM) jointly plan to produce “ahimsa meat”.
- ❖ It is India’s first laboratory meat project.
- ❖ The scientists will develop mutton and chicken from stem cells, without animal rearing.
- ❖ India is among few countries where the government is funding the project to produce fat-free boneless meat.

Meat's Ecological Footprint

- 25%** of planet's land used as pasture for cattle
- 15%** of all greenhouse gases released by livestock
- 80k** litres of water goes into rearing a 10kg goat. So, a kilo of mutton spent up 8,000 litres before finding its way to the kitchen
- 71%** of Indians aged 15 and above are non-vegetarians. So, imagine the amount of water usage that means for rearing livestock for meat

Right to Travel Abroad

- ❖ Supreme court has ruled that right to travel abroad is a genuine and “basic human right” like marriage and family.
- ❖ The order was delivered in Satish Chandra Verma vs Union of India case.

- ❖ Tamilnadu cadre IPS officer Satish Chandra was refused permission to take a private trip abroad due to departmental proceedings.
- ❖ The Supreme Court referred to its Maneka Gandhi vs Union of India 1978 judgment and upheld the right of the appellant to travel abroad.
- ❖ It also referred to the landmark U.S. Supreme Court case of 1958 Kent vs Dulles.
- ❖ This case stated that “freedom to go abroad has much social value and represents the basic human right of great significance”.

Victim Compensation

- ❖ Supreme Court has ordered the Gujarat government to pay ₹50 lakh to Bilkis Yakoob Rasool Bano.
- ❖ She is a gang-rape survivor of the 2002 communal pogrom against Muslims in Gujarat under the rule of Narendra Modi.
- ❖ The Code of Criminal Procedure was amended in 2008 to insert Section 357A.
- ❖ Section 357 A mandates every state government to prepare a scheme to set up a fund from which compensation can be paid to victims of crime and their dependants.

Garia Festival

- ❖ The Garia Puja is the biggest festival of the tribals in Tripura.
- ❖ It is usually held from the beginning of the last day of the month of Chaitra till the seventh day of the month of Vaishakha.
- ❖ People offer prayers to a bamboo pole whom they consider as their Lord Garia.
- ❖ The puja is followed by traditional dance derived from the Garia dance or the dance of Shiva and other cultural activities.



Khasi Kingdoms

- ❖ A federation of 25 Himas or Khasi kingdoms plan to revisit the 1948 agreements that made present-day Meghalaya a part of India.
- ❖ The 25 states were ruled by a Syiem (king-like head of a Hima).
- ❖ They aim to safeguard tribal customs and traditions from Central laws in force or the proposed Citizenship (Amendment) Bill.
- ❖ All 25 Khasi states had signed the Instrument of Accession and Annexed Agreement with the Dominion of India between December 15, 1947, and March 19, 1948.
- ❖ But they have not signed the “Instrument of Merger” as done by all former Indian states.

Chinese Milk

- ❖ India has extended the ban on import of milk and its products, including chocolates, from China.
- ❖ Milk from China is suspected to contain melamine in it.
- ❖ The ban will be enforced until the capacity of all laboratories at ports of entry have been suitably upgraded for testing “melamine”.
- ❖ Melamine is a toxic chemical used for making plastics and fertilisers.
- ❖ Melamine can cause bladder stones in animals.
- ❖ It can also cause kidney stones in humans.
- ❖ India is the world's largest producer and consumer of milk.
- ❖ It produces around 150 million tonne milk annually.
- ❖ Uttar Pradesh is the leading state in milk production followed by Rajasthan and Gujarat.

Malaria Free India

- ❖ The Indian Council of Medical Research (ICMR) has launched the 'Malaria Elimination Research Alliance (MERA)' India.
- ❖ The alliance was launched on April 25, 2019 on occasion of the World Malaria Day 2019.
- ❖ The National Vector Borne Diseases Control Program (NVBDCP) aims to achieve "Malaria free India by 2030".
- ❖ NVBDCP stresses more on research-oriented programs to eradicate malaria.
- ❖ MERA India is a gathering of partners working together to plan and scale up research to eliminate malaria.

QS EMBA Rankings 2019

- ❖ Indian Institute of Management-Bangalore's (IIM-B) post-graduate programme in Enterprise Management (PGPEM) has secured the 12th rank in APAC (Asia Pacific) listing.
- ❖ Also, it came 61st rank globally in the QS Executive MBA Rankings 2019.
- ❖ With this, it became the only Indian B-school to secure a place among the top 100 B-Schools across the world.
- ❖ IIM-B also ranked first under the Management category in the National Institutional Ranking Framework Rankings 2019.

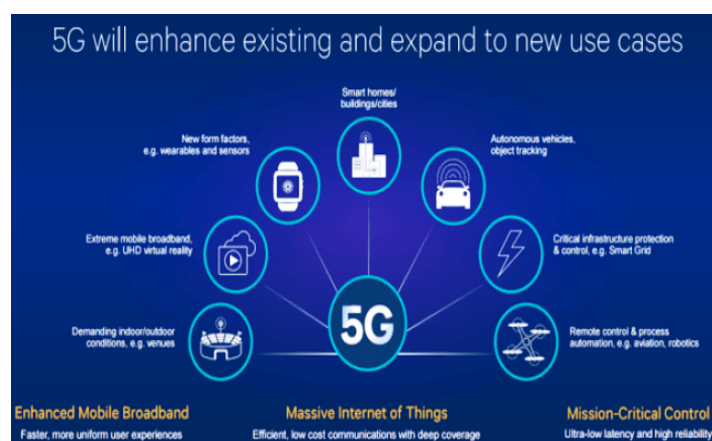
Missile Deal

- ❖ Army has invoked emergency powers in a missile purchase deal.
- ❖ Defence ministry permitted purchases up to ₹300 crore on a priority basis.
- ❖ Weapons to be procured are
 - Spike-LR Anti-Tank Missiles from Israel.
 - Iгла-S Very Short-Range Air Defence Systems (VSHORAD) from Russia.

INTERNATIONAL

1st district with 5G coverage

- ❖ China's Shanghai claimed to have the world's first district with 5G coverage and a broadband gigabit network. It has conducted trial runs of the 5G network.
- ❖ The trial runs of the 5G network started in Shanghai's Hongkou district.



- ❖ 5G is the next generation of cellular technology with download speeds that are 10 to 100 times faster than 4G LTE networks.

Largest power storage system in Asia

- ❖ Tesla has developed its 'largest power storage system in Asia' at Osaka train station in Japan to reduce energy demand and provide emergency backup power to trains in Japan.
- ❖ It was launched in partnership with Kintetsu, a railway operator in Japan's Osaka.
- ❖ This 7 megawatt-hours (MWh) system is not only the largest energy storage project in Asia, but also the fourth largest in the greater Asia-Pacific (APAC) region.

Imperial era Reiwa

- ❖ Japan declared 'Reiwa' as the name of its new imperial era that will begin on May 1, 2019 once the new Crown Prince Naruhito ascends the Chrysanthemum Throne.
- ❖ The new era will be the 248th in the history of Japan.
- ❖ Japan's emperor has No political power, but remains a highly important symbolic figure.

India-Africa IAIARD

- ❖ India will set up India-Africa Institute of Agriculture and Rural Development (IAIARD) in the land-locked African country Malawi, in consultation with National Bank for Agriculture and Rural Development Consultancy service (NABCONS).
- ❖ IAIARD will be a Pan-African Institute wherein trainees from Malawi and all other African countries will receive training to develop their human resources and build their capacity.
- ❖ Focus areas will be agro-financing and micro-financing.
- ❖ This institute will be the first of its kind developed in an African country by India.

Global Report on Food Crises

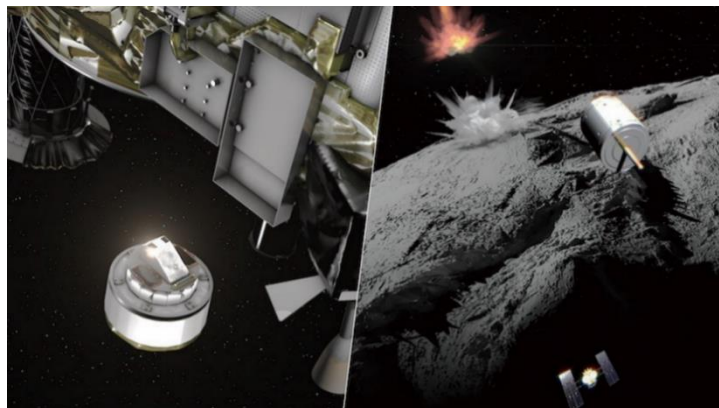
- ❖ The European Union, the Food and Agriculture Organization of the United Nations (FAO), and the UN World Food Programme (WFP) jointly presented a report on global food crises.
- ❖ It finds that around 113 million people in 53 countries experienced acute food insecurity in 2018.



- ❖ Nearly two-thirds of those facing acute hunger are in just 8 countries: Afghanistan, Congo, Ethiopia, Nigeria, South Sudan, Sudan, Syria and Yemen.
- ❖ Acute food insecurity is the most extreme form of hunger.

Hayabusa - 2

- ❖ Japan's spacecraft Hayabusa-2 recently dropped an explosive on an asteroid to make a crater.
 - It's aims to collect underground samples to find possible clues to the origin of the solar system.



Nationwide 5G Network

- ❖ South Korea has launched the world's first nationwide 5G mobile network communication.
- ❖ 5G will use spectrum in the existing LTE frequency range (600 MHz to 6 GHz).
- ❖ 5G will provide smartphones with near-instantaneous connectivity, 20 times faster than 4G.
- ❖ This allows users to download entire movies in less than a second.
- ❖ The 5G technology is crucial for the future development of devices such as self-driving vehicles.



INS Kolkata and INS Shakthi

- ❖ Two Indian naval ships, INS 'Kolkata' and 'Shakti', would take part in a function to celebrate the 70th anniversary of the China's People's Liberation Army (PLA), at Quingdao, China.



- ❖ INS Kolkata is the lead ship of the Kolkata-class stealth guided-missile destroyer of the Indian Navy.
- ❖ It's lists of armaments reportedly include Brahmos supersonic anti-ship and land-attack cruise missiles.
- ❖ INS Shakti is a tanker and supply ship.

Maldives

- ❖ The exiled former leader of the Maldives, President Mohamed Nasheed has won in the recently concluded national elections in Maldives.
- ❖ The result was a landslide victory for the Maldivian Democratic Party, which won over two-thirds of seats in the People's Majlis.
- ❖ People's Majlis is the Unicameral legislative body of Maldives.

Exercise AFRICAN LION 2019

- ❖ Morocco-US sponsored exercise 'African Lion 2019', held at Morocco from March 16 to April 7, 2019.
- ❖ The drills include training on Counter terrorism operations, land and air exercises and also tactical stimulation.
- ❖ Additionally, Military Units from Canada, Spain, Great Britain, Senegal and Tunisia are taking part in the 16th Edition of this Exercise.

Australia and 7 nations military exercise

- ❖ Australia is conducting 7 nation Indian Ocean military exercise along with Sri Lanka, India, Malaysia, Thailand, Vietnam, Indonesia and Singapore.
- ❖ Australia deploy 4 Naval Ships and one military aircraft along with 1000 security personnel making it one the biggest military exercise.

- ❖ The exercise is aimed to counter the growing Chinese influence in the India Ocean.
- ❖ The Australian forces started the exercise from Sri Lanka and reached India then moved to other participating nations and will return after two and half months.

ADB's Report on Disaster Resilience

- ❖ Asian Development Bank's (ADB) released a report titled "Asian Development Outlook 2019: Strengthening Disaster Resilience" recently.
- ❖ As per the report, to build disaster-resilient infrastructure, investment needs in developing Asia are estimated at 26 trillion dollars from 2016 to 2030.
- ❖ This is because developing economies across Asia are among the most vulnerable to natural disasters and have suffered damages of around 644 billion dollars since 2000.

Iran-US

- ❖ US President Donald Trump announced designating of Iran's 'Islamic Revolutionary Guard Corps (IRGC)', an elite military force, as a terrorist organization.
- ❖ It is for the first time that the United States designated another nation's military as a terrorist organization.
- ❖ In retaliation, Iran declared the US Central Command, CentCOM– the Middle East based armed forces of America, as a terrorist organization.
- ❖ The IRGC was formed after the 1979 Islamic revolution in Iran with a mission to defend the clerical regime.
- ❖ It is now Iran's most powerful security organization.

Libyan Crisis

- ❖ India has evacuated its entire contingent of peacekeeping forces comprising of 15 Central Reserve Police Force (CRPF) personnel from Tripoli, Libya.
- ❖ The situation in the war-hit nation has suddenly worsened.
- ❖ Libyan Crisis started in 2011 with the popular uprising which overthrew and ended dictator Muammar Gaddafi's long rule.
- ❖ Libya is currently ruled by the internationally recognized government headed by Fayeze al-Sarraj, the UN-backed Government of National Accord (GNA) but it is opposed by various militias.

- ❖ Libya, a North African country, has the largest oil reserves in entire Africa.

Highest Remittances

- ❖ According to the 2019 edition of the World Bank's Migration and Development Brief, India retained its position as the world's top recipient of remittances.
- ❖ Indian diaspora has remitted \$79 billion back to the country in 2018.
- ❖ Banks were the most expensive remittance channels, charging an average fee of 11 per cent.

Ambitions Beyond Growth

- ❖ "Ambitions Beyond Growth" is an annual report published by UN Economic and Social Commission for Asia and the Pacific (UNESCAP).
- ❖ According to the report, India needs to spend nearly \$2 (Rs140) per day per person to remove poverty till 2030 to achieve Sustainable Development Goals (SDGs).
- ❖ According to the 2014 'C Rangarajan committee on Poverty' report, India has around 363 million people living in poverty.

UNESCAP

- ❖ The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) is the regional development arm of the United Nations for the Asia-Pacific region.
- ❖ It is established in 1947 with its headquarters in Bangkok, Thailand.
- ❖ India is a founding member of UNESCAP.
- ❖ UNESCAP functions under UN ECOSOC (United Nations Economic and Social Council).

Lord Howe Island

- ❖ The corals off Lord Howe Island, the world's southernmost coral reef, has been hit by bleaching this year due to rising sea temperatures.
- ❖ UNESCO records the Lord Howe Island Group as a World Heritage Site of global natural significance.
- ❖ This volcanic remnant island is located in the Tasman Sea between Australia and New Zealand.

Corals

- ❖ Corals are animals which live in a symbiotic relationship with microscopic algae called zooxanthellae (which live within the coral tissue).
- ❖ The zooxanthellae convert sunlight into food, providing corals with up to 90 per cent of their energy needs. They also give corals much of their colour.



Coral bleaching

- ❖ Bleaching occurs when stressful conditions, such as heat, cause this relationship to break down, resulting in the corals expelling their zooxanthellae.
- ❖ This leaves the coral tissue mostly transparent, revealing the coral's bright white skeleton.
- ❖ This loss of their symbiotic algae means bleached corals are essentially starving.

Sri Lanka – New Railway Line

- ❖ Sri Lanka has opened a new railway line, built with China's assistance, connecting its coastal city of Matara and Beliatta in Hambantota province.
- ❖ The 26.75-km long Matara-Beliatta railway extension is the first to be constructed in Sri Lanka since 1948.

Drone Delivery

- ❖ Google's parent company Alphabet has developed a drone-based delivery service named 'Wing' in the Australian city of Canberra on a pilot basis.
- ❖ The drones will deliver food and drinks as well as medication directly to the homes of customers.

Benjamin Netanyahu

- ❖ Prime Minister Benjamin Netanyahu has won the Israeli national election, securing a record fifth term in office.



- ❖ The Right-wing leader's Likud party has won 35 seats out of the 120 seats in the Knesset and is widely expected to form government again.
- ❖ Knesset is the parliament of Israel.
- ❖ Mr. Netanyahu is now set to become the longest-serving Prime Minister, overtaking David Ben-Gurion, the founder of Israel.

HR 2123 BILL

- ❖ A bipartisan group comprising half a dozen influential American lawmakers introduced a new bill HR 2123 to advance the US-India strategic relationship.
- ❖ If enacted, the legislation would ensure that the US State Department treat India as a 'NATO ally' for the purposes of the Arms Export Control Act.
- ❖ It seeks to send a powerful signal that defence sales to India should be prioritised.

Russian Award

- ❖ Prime Minister Narendra Modi has been honoured with Russia's highest state decoration, the Order of St Andrew the Apostle.
- ❖ The Order was established in 1698 by Tsar Peter the Great, in honour of Saint Andrew, the first apostle of Jesus and patron saint of Russia.
- ❖ It was abolished under the USSR before being re-established as the top Russian order in 1998.
- ❖ PM Modi has been decorated with the order for promoting a special and privileged strategic partnership between Russia and India and friendly relations between the Russian and Indian people.

Notre Dame Fire

- ❖ While undergoing renovation and restoration, Notre-Dame de Paris (meaning "Our Lady of Paris") cathedral caught fire and sustained significant damage.
- ❖ Damages included the collapse of the entire roof and the main spire.
- ❖ The cathedral is considered to be one of the finest examples of French Gothic architecture.
- ❖ Its construction was begun in 1160 under Bishop Maurice de Sully and was largely completed by 1260, though it was modified frequently in the ensuing centuries.
- ❖ The cathedral was the site of the Coronation of "Napoleon the Great" as Emperor of France.



- ❖ Victor Hugo's famous novel 'The Hunchback of Notre-Dame' was written to spread awareness about conserving the cathedral's unique architecture in 1831.

RAAVANA-1

- ❖ Sri Lanka's first satellite Raavana-1 was launched into space from America's NASA's Flight Facility.
- ❖ The satellite was designed and built at the Kyushu Institute of Technology in Japan by two Sri Lankan research engineers.
- ❖ The launch of Raavana-1 marks Sri Lanka's entry into the global space age.

India – Vietnam

- ❖ The second edition of the bilateral maritime exercise was held between the Indian Navy and Vietnam Peoples' Navy at Cam Ranh Bay, Vietnam.
- ❖ From the Indian side - INS Kolkata and INS Shakti warships participated in the annual exercise.

- ❖ In 2016 India and Vietnam have elevated their bilateral ties to that of ‘Comprehensive Strategic Partnership’.
- ❖ The first edition of the exercise was conducted in 2018 at Da Nang, Vietnam.

Artificial Intelligence Summit

- ❖ UAE is set to host the world’s foremost Artificial Intelligence Summit called ‘AI Everything’ to empower global dialogue on the future of government, business and society
- ❖ It will be hosted by the UAE National Programme for Artificial Intelligence, with the support of International Telecommunication Union (ITU), and the World Intellectual Property Organisation (WIPO), and in strategic partnership with Smart Dubai.

Jamaica’s Aadhar

- ❖ Jamaica’s highest court has struck down their country’s “National Identification and Registration Act (NIRA)”.
- ❖ It quoted Indian Supreme Court Justice D Y Chandrachud’s dissenting judgment on the Aadhaar Act to support its decision.
- ❖ Jamaica’s NIRA Act is similar to India’s AADHAR.
- ❖ It allowed similar collection of biometric information from all citizens to be centrally stored.

NepaliSat-1

- ❖ Nepal’s first satellite NepaliSat-1 was launched into space from National Aeronautics and Space Administration (NASA) launch center in the US.
- ❖ The satellite was developed by two Nepalis Abhas Maskey and Hariram Shrestha at Japan’s Kyushu Institute of Technology.



Asian Tea Alliance (ATA)

- ❖ The Asian Tea Alliance (ATA), a union of five tea-growing and consuming countries, was launched in Guizhou in China.
- ❖ Indian Tea Association, China Tea Marketing Association, Indonesian Tea Marketing Association, Sri Lanka Tea Board and Japan Tea Association are the members.
- ❖ The alliance was formed with an aim to enhance global consumption of tea, while creating a sustainability agenda for the future of Asian tea.
- ❖ India is the second largest producer of tea (after China).
- ❖ India is the largest consumer of tea in the world.
- ❖ Tamilnadu is the third largest tea cultivating state in India.

Developmental Projects in Africa

- ❖ India will collaborate with Japan and United Arab Emirates (UAE) to develop two projects in Africa.
- ❖ It seeks to expand its footprint in the booming economy of the continent and counter growing Chinese influence in the region.
- ❖ Under the arrangement,
 - India along with Japan will build a cancer hospital in Kenya.
 - India join hands with the UAE to set up an information and communications technology (ICT) centre in Ethiopia.

Amartya Sen

- ❖ The London School of Economics (LSE) has announced the establishment of the Amartya Sen Chair in “Inequality Studies”.
- ❖ The decision was taken to honour the Nobel laureate who has also served as the Professor of Economics at LSE.
- ❖ Amartya Sen was awarded Noble Prize in the year 1998 for his works in Welfare Economics.
- ❖ Welfare economics is a branch of economics that seeks to evaluate economic policies in terms of their effects on the well-being of the community.

Ukraine President

- ❖ Ukrainians have chosen their new president, the 41-year-old television comedian and actor Volodymyr Zelensky.
- ❖ He became popular by playing the role of a fictional president in the popular local comedy “Servant of the People.”
- ❖ Ukraine is the only country in the world, other than Israel, with both a Jewish prime minister (Volodymyr Groysman) and a Jewish president.

Joint border rapid reaction force

- ❖ Iran and Pakistan have agreed to set up a joint border rapid reaction force.
- ❖ These countries have witnessed increasing violence and attacks by militants in the volatile border.



- ❖ The major concern is around the Iranian Sistan province and Balochistan province of Pakistan.

Iranian Oil

- ❖ The U.S. has decided that it will not renew exemptions from its sanctions for countries importing oil from Iran.
- ❖ The ending of sanction waiver is part of the US strategy to exert maximum pressure and isolate Iran.
- ❖ India, China, and U.S. allies Japan, South Korea and Turkey will be the most impacted.
- ❖ India is the second biggest buyer of Iranian oil after China.
- ❖ India should get a waiver from the U.S. for both
 - Oil Import
 - Development of Chabahar Port

State of the World: Population Report

- ❖ United Nations Population Fund's (UNFP) has released the State of World Population 2019 report.
- ❖ It states that India's population grew at an average of 1.2 % annually between 2010 and 2019.
- ❖ It was more than double the annual growth rate of China.
- ❖ The report includes, for the first time, data on women's (aged between 15-49) ability to make decisions over three key areas:
 - Sexual intercourse with their partner
 - Contraception use
 - Health care
- ❖ The absence of reproductive and sexual rights has major and negative repercussions on women's education, income and safety.

Exit Visa

- ❖ The UN's International Labour Organisation has announced that Qatar is set to abolish its controversial exit visa system for all foreign workers by the end of 2019.
- ❖ In September 2018, Qatar approved legislation to scrap the "kafala" or "sponsorship system".
- ❖ Kafala required that foreign workers obtain permission from their employers to transfer employment, enter or leave the country.
- ❖ Labour reforms are made with the 2022 football world cup in mind.
- ❖ Qatar hosts 2022 football world cup.

ECONOMY

Fiscal Discipline Committee

- ❖ The Chairman of the Fifteenth Finance Commission N K Singh has emphasised the need for a fiscal council to enforce fiscal rules and for better management of public debt.

- ❖ Article 293 (3) of the constitution places an upper limit on the ability of the state governments to borrow. They cannot breach that ceiling.
- ❖ But Central Government does not any have constitutional checks on the amount of the money it can borrow.
- ❖ India's debt-to-GDP ratio of the states and the Centre combined is also way too high at 70%.
- ❖ An Institutional mechanism like Fiscal Council is needed to enforce fiscal rules and to keep a check on Centre's fiscal consolidation.

Manufacturing PMI Index

- ❖ The Nikkei India Manufacturing Purchasing Managers Index stands at 52.6 indicating that the manufacturing sector is losing momentum.
- ❖ A reading above 50 indicates expansion while a point below that level points to contraction of manufacturing sector.
- ❖ The index is based on data compiled from monthly replies to questionnaires sent to purchasing executives in more than 400 industrial companies.

Investment Advisers

- ❖ The Securities and Exchange Board of India (SEBI) has proposed a self-regulatory organisation (SRO) for the growing number of investment advisers.
- ❖ Such a measure is expected to address issues related to the quality of advice given to investors by such entities.
- ❖ SRO will also deal with complaints alleging charging of exorbitant fees, false assurance of returns, misconduct etc. by investment advisers.

Ways and Means advances

- ❖ The Reserve Bank of India, in consultation with the Government of India, has decided that the limits for Ways and Means Advances (WMA) for the first half of the financial year 2019-20 will be Rs 75000 crore.
- ❖ The interest rate on WMA will be Repo Rate and overdraft will be 2% above the Repo Rate.
- ❖ RBI in consultation with Central Government can provide an overdraft facility when the WMA limit is breached.
- ❖ Ways and Means Advances is the temporary loan facility provided by the RBI to the centre and state governments.

- ❖ The WMA scheme was introduced in 1997 to meet any temporary mismatches in the receipts and payments of the government.

Anti-dumping duty

- ❖ India has levied anti-dumping duty worth up to USD 1,559 per tonne on imports of a components used in solar cell making from China, Malaysia, Saudi Arabia and Thailand for five years.
- ❖ Ethylene Vinyl Acetate sheet is imported cheaply from these countries, stifling domestic manufacturers of solar PV (Photo Voltaic) modules.
- ❖ The anti-dumping duty has been imposed based on the recommendations of the commerce ministry's investigation arm Directorate General of Trade Remedies (DGTR).
- ❖ Anti-dumping duty is aimed at ensuring fair trading practices and creating a level-playing field for domestic producers.

Interest Rate Cut

- ❖ The Reserve Bank of India (RBI) cut its repo rate by 25 basis points to 6% and lowered the GDP forecast to 7.2% for the current financial year from 7.4% projected earlier.
- ❖ Repo rate is the rate at which RBI lends money to commercial banks.
- ❖ This is the second consecutive rate cut from RBI under new Governor Shaktikanta Das.

Growth Forecast

- ❖ Asian Development Bank (ADB) has lowered India's growth forecast for 2019-20 to 7.2 per cent from 7.6 per cent estimated earlier.
- ❖ This is due to moderation in global demand and likely shortfall in revenue on the domestic front.
- ❖ The ADB is a regional development bank established on 19 December 1966, which is headquartered in the city of Mandaluyong, Metro Manila, Philippines.
- ❖ From 31 members at its establishment, ADB now has 68 members, of which 49 are from within Asia and the Pacific and 19 from outside.
- ❖ Takehiko Nakao is the current President of ADB.

CBDT signs 18 APAs

- ❖ The Central Board of Direct Taxes (CBDT) has entered into 18 Advance Pricing Agreements (APAs), including 3 Bilateral APAs (BAPAs).
- ❖ The total number of APAs entered into by the CBDT so far stands at 271.
- ❖ An APA is an agreement between a taxpayer and the tax authority determining the Transfer Pricing methodology for pricing the tax payer's international transactions for future years.

Lakshmi Vilas Bank

- ❖ Lakshmi Vilas Bank (LVB) and India Bulls Housing Finance (IBHF) boards have approved merger of the two entities.
- ❖ The new entity will be called Indiabulls Lakshmi Vilas Bank.
- ❖ CAR is the ratio of a bank's capital in relation to its risk weighted assets and current liabilities.
- ❖ This rate is decided by RBI to prevent commercial banks from taking excess leverage and becoming insolvent in the process.

LCR Norms

- ❖ In a bid to further improve the cash position of banks, the RBI has provided additional 2 per cent liquidity window to the lenders by tweaking liquidity coverage ratio (LCR) norms.
- ❖ The LCR indicates the proportion of highly liquid assets held by banks to ensure their ability to meet short-term obligations.

External Benchmarking

- ❖ The RBI has shelved indefinitely its proposal to get commercial banks to link their lending rates to an external benchmark like the repo rate or the government treasury bill rate.
- ❖ External benchmarking means commercial banks linking the interest rates charged by them on different categories of loans to an external interest rate.
- ❖ Benchmarking of a bank's Interest rate with external rates like repo rate is beneficial for customers of the banks.
- ❖ State Bank of India is the only bank that has linked its deposits rate to repo rate.

Currency Chest

- ❖ RBI has issued new guidelines to set up Currency chests.

- ❖ The central bank has stipulated that the currency chests should have CBL (Chest Balance Limit) of Rs 1,000 crore, subject to reasonable restrictions.
- ❖ The new chests should have a processing capacity of 2.1 lakh pieces of banknotes per day in hilly, inaccessible areas and 6.6 lakhs pieces of note in all other areas.
- ❖ Currency chests are branches of selected banks authorised by the RBI to stock rupee notes and coins and to distribute them.

Growth Forecast

- ❖ Gita Gopinath, the chief economist of International Monetary Fund (IMF) has slashed India's growth estimate for the financial year 2019-20 from 7.7% to 7.5%.
- ❖ She has raised concerns about deflator or the base year used to calculate the real GDP and stressed the need for transparency in statistics released by the Government.
- ❖ India is a subscriber to the IMF's Special Data Dissemination Standards (SDDS).

Statistics in India

- ❖ The Ministry of Statistics and Programme Implementation (MOSPI) is ministry concerned with coverage and quality aspects of statistics released.
- ❖ It was formed in 1999 after the merger of the Department of Statistics and the Department of Programme Implementation.
- ❖ The Statistics Wing, also called the National Statistical Office (NSO) consists of
 - The Central Statistics Office (CSO)
 - The National Sample Survey Office (NSSO)
 - The Computer center
- ❖ The Programme Implementation Wing has three Divisions
 - Twenty Point Programme
 - Infrastructure Monitoring and Project Monitoring
 - Member of Parliament Local Area Development Scheme (MPLAD).

Attachment of Property

- ❖ The Delhi High Court has held that in case of attachment of tainted properties obtained from "money laundering" and "from scheduled criminal activity", PMLA prevails over the RBDA, SARFAESI and Insolvency code.

- ❖ Section 71 of the PMLA has the overriding effect over other existing laws.

Act	Abbreviation	Year	Objective
RBDA	Recovery of Debt and Bankruptcy Act	1993	To establish Tribunals for expeditious adjudication and recovery of debts due to banks and financial institutions
PMLA	Prevention of Money Laundering Act	2002	To prevent money-laundering and to provide for confiscation of property derived from money-laundering
SARFAESI Act	The Securitisation and Reconstruction of Financial Assets and Enforcement of Securities Interest Act	2002	It allows banks and other financial institution to auction residential or commercial properties (of Defaulters) to recover loans
Insolvency Code	The Insolvency and Bankruptcy Code	2016	It is also a bankruptcy law which seeks to consolidate the existing framework by creating a single law for insolvency and bankruptcy.

Amazon – China

- ❖ Amazon has announced that it is closing its domestic e-commerce business in China.
- ❖ Amazon sells less in the country than in Japan, the smallest market that it does report.
- ❖ Amazon bought its way into China in 2004 with a takeover of Joyo.com
- ❖ Amazon rebranded the Joyo business in 2011 to Amazon China.

TCS – India Post

- ❖ Tata Consultancy Services (TCS) has partnered with India Posts in a multi-year deal to make post offices a multi-service digital hub
- ❖ TCS will integrate the network of over 150,000 post offices and create the largest distributed ePostal network in the world.

Quasi-Cryptocurrency

- ❖ International Monetary Fund (IMF) and the World Bank are partnering up to launch a private blockchain and “quasi-cryptocurrency.”
- ❖ The asset, “Learning Coin,” will be accessible only within the Washington-based multinational agencies.
- ❖ Since the coin has no monetary value, it’s not an actual cryptocurrency.

ETMONEY Financial Services App

- ❖ ETMONEY India’s largest app for financial services has integrated with Unified Payment Interface (UPI) as a payment method.
- ❖ The reason for this is to double its monthly user base by the end of 2019.
- ❖ This integration will simplify the mutual fund payment for millions of ETMONEY users.
- ❖ ETMONEY is owned by Times Internet which is a part of the Times Group.

Strong Action

- ❖ The Investor Education and Protection Fund (IEPF) Authority has ordered The Peerless General Finance and Investment Company to transfer deposits worth about Rs 1,514 crore to the IEPF.
- ❖ Money deposited by 1 Crore individual investors was pending with The Peerless General Finance and Investment Company Limited for the last 15 years.
- ❖ IEPF was set up under the Ministry of Corporate Affairs as a statutory body under Companies Act 2013.

Data Localisation

- ❖ U.S. technology industry groups are protesting against India’s data localisation plans.
- ❖ They fear that it will increase scrutiny and costs.
- ❖ RBI issued a directive on data localisation in April 2018.
- ❖ It has mandated all payments companies, global and local, to set up data storage facilities within India by October 2018.
- ❖ Most of the major companies are yet to meet the norms.
- ❖ B.N. Srikrishna committee on data privacy recommended that all “critical personal data” should be processed only within the country.

Jan Dhan

- ❖ The total deposits in Jan Dhan Account are set to cross Rs 1 lakh crore soon.
- ❖ On 3rd April, the total balance in the Jan Dhan accounts was at Rs 97,665.66 and the total number of Jan Dhan accounts crossed 35.39 crores.
- ❖ More than 27.89 crores account holders have been issued the Rupay debit cards.

Shell Companies

- ❖ The central government is likely to extend the deadline and relax the rules for submission of INC-22 forms by firms.
- ❖ INC-22 forms required companies incorporated on or before December 31, 2017 to provide details regarding the location of their offices, directors, and proof of business.
- ❖ This had been done in an attempt to weed out shell companies.

Shell Companies

- ❖ A shell corporation is a company or corporation that exists only on paper and has no office and no employees.
- ❖ But it may have a bank account or may hold passive investments or it may be the registered owner of assets, such as intellectual property, or ships.
- ❖ Shell companies include multiple layers of companies that have been created for the purpose of diverting money or for money laundering.

India's first 'Green Car Loan'

- ❖ On the occasion of World Earth Day- April 22, 2019 the State Bank of India has launched India's first 'Green Car Loan' (Electric Vehicle).
- ❖ It aims to encourage customers to buy electric vehicles.
- ❖ The new scheme 'Green Car Loan' will offer loan at 20 basis points lower than the interest rate on the existing car loan schemes.



Ombudsman Scheme

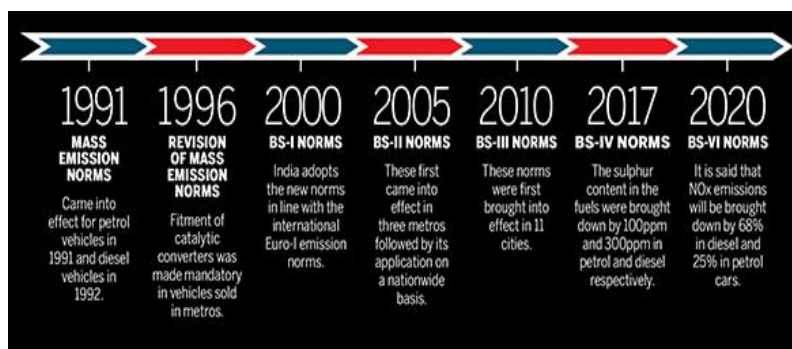
- ❖ The RBI has extended the coverage of Ombudsman Scheme.
- ❖ It has now included non-deposit taking NBFCs (Non-Banking Finance Company).
- ❖ NBFC with asset size of ₹100 crore or higher will get an ombudsman.
- ❖ This provides easy and speedy complaint redressal mechanism to customers.
- ❖ An officer of RBI not below the rank of general manager will be appointed as ombudsman.

e-way bill system

- ❖ e-way bill is an electronic way document required to be carried by a person in charge of the transporting the goods.
- ❖ It should be generated when goods of the value of more than Rs. 50,000 are shipped.
- ❖ The Finance Ministry of India has introduced changes in the e-way bill system.
- ❖ The e-way bill must be raised before the goods are shipped.
- ❖ It should include details of the goods, their consignor, recipient and transporter.
- ❖ Failure to produce an e-way bill can attract a penalty of Rs 10,000 or amount of tax sought to be evaded whichever is higher.

No Diesel Cars

- ❖ The country's largest vehicle manufacturer Maruti Suzuki has announced that it will stop manufacturing diesel vehicles.
- ❖ It is because of the new Bharath VI emission norms that will come into effect on April 1, 2020.
- ❖ Bharat Stage Emission Standards (BSES) are emission standards instituted by Government of India.
- ❖ History of Emission norms in India



BS VI

- ❖ The main difference in standards between the existing BS-IV and the new BS-VI auto fuel norms is the presence of sulphur.
- ❖ The BS-VI fuel is estimated to bring around an 80 per cent reduction of sulphur, from 50 parts per million to 10 ppm.
- ❖ The emission of NO_x (nitrogen oxides) from diesel cars is also expected to come down by nearly 70 per cent and 25 percent from Petrol cars.

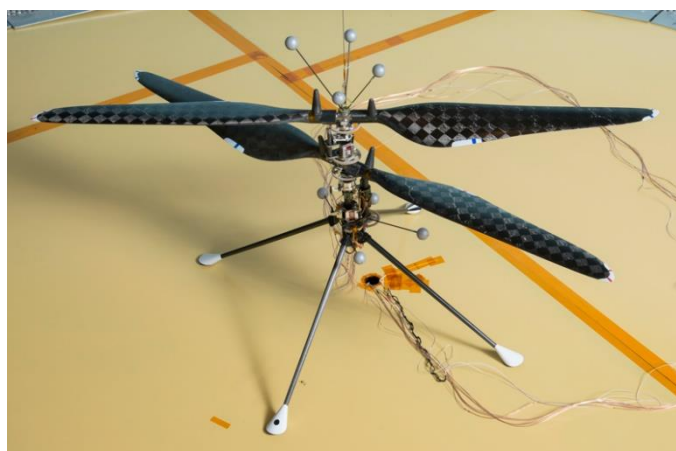
SCIENCE AND TECHNOLOGY

Toluene conversion into useful product

- ❖ Two-member team at the IIT Madras has successfully converted petroleum waste-product toluene into benzoic acid.
- ❖ A green oxidant and water instead of organic acid were used for converting toluene into benzoic acid.
- ❖ Benzoic acid is used as a food preservative (E210) and medicine for fungal/bacterial infection.

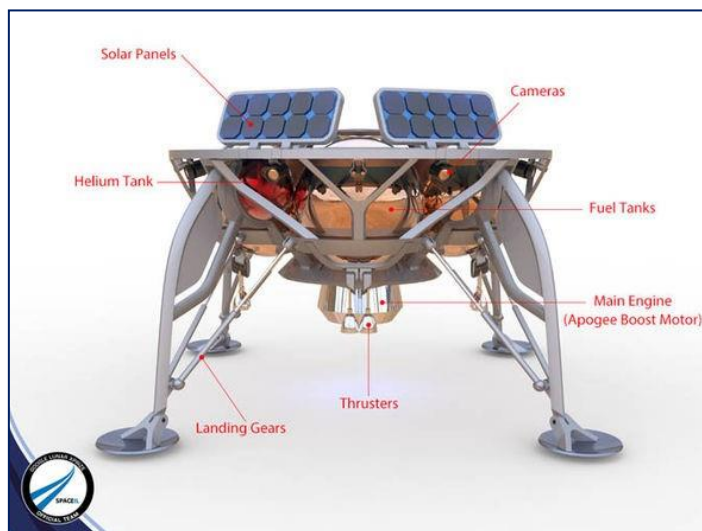
NASA's Mars helicopter

- ❖ NASA's Mars Helicopter has successfully completed a series of tests and is ready to take flight over the Red Planet.
- ❖ This Mars Helicopter will ride to Mars attached to the undercarriage of the Mars 2020 rover.
- ❖ This helicopter could function in extremely cold temperatures, including nights with temperatures as low as minus 90 degrees Celsius.



Moonshot Award

- ❖ X Prize Foundation announced a \$1 million “Moonshot Award”.
- ❖ That award will go to Israel’s SpaceIL, if its Beresheet spacecraft is able to successfully land on the lunar surface next month.
- ❖ SpaceIL was also competed for the Google Lunar X Prize.
- ❖ This competition offered a \$20 million grand prize to the first privately developed spacecraft to land on the moon, travel at least 500 meters across its surface, and return images and video.



Scissors Enzyme

- ❖ Scientists at the Centre for Cellular & Molecular Biology (CCMB) have discovered a new enzyme “Murein Peptidase” which helps in breaking cell walls of bacteria.
- ❖ This offers a potential for a new drug delivery route to arrest the anti-bacterial resistance through existing antibiotic drugs.
- ❖ Scissors enzyme is the enzyme that regulates the growth of cell wall in bacteria.
- ❖ This method of drug delivery blocks the ‘scissors enzyme’ from functioning.
- ❖ In contrast, the classical antibiotic drugs like Penicillin target only the last stage of cell synthesis to prevent bacterial cell growth.
- ❖ Blocking the enzyme can pave new ways to target microbes and can lead to a production of new wave of antibiotic drugs.

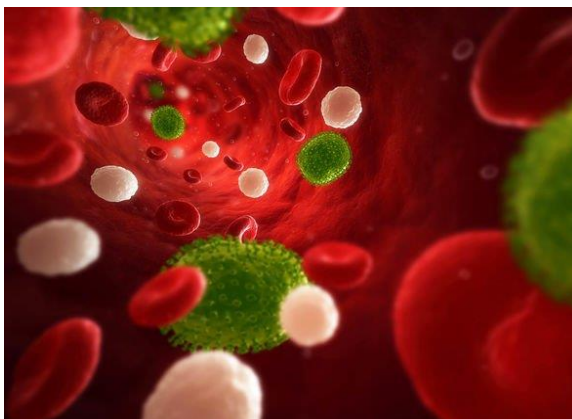
CCMB

- ❖ CCMB conducts high quality basic research and trainings in frontier areas of modern biology and inter-disciplinary areas of biology.
- ❖ The Hyderabad based institute was started in 1977 and operates under the aegis of the Council of Scientific and Industrial Research (CSIR).

- ❖ It is designated as “Center of Excellence” by the Global Molecular and Cell Biology Network, UNESCO.

Superbug Fungus

- ❖ *Candida auris*, a drug resistant superbug fungus has spread rapidly and raised alarm in the medical community.
- ❖ Discovered in 2009 in Japan, the fungus has spread through at least 15 countries with deadly consequences.



- ❖ *C. auris* is not destroyed by major antifungal medications.
- ❖ The germ preys on people with weakened immune systems.
- ❖ Rampant use of fungicides and azole pesticides on crops are suspected to have caused the rise of *C.auris*.

New exoplanet TOI-197.0

- ❖ Researchers have discovered a new five-billion-year-old planet that is 60 times bigger than Earth using data from NASA's space telescope TESS.
- ❖ This planet, known as TOI-197.0, is currently one of the best described exoplanets.
- ❖ Scientists have dubbed it a "hot Saturn" because it is about the size of Saturn, but much warmer.
- ❖ This is because the new planet is much closer to the star that it orbits than Saturn is to the sun.

Gene Editing

- ❖ Researchers from the University of Georgia (UGA) were able to target the pigmentation genes of *Anolis sagrei* lizards to create four albino offsprings.

- ❖ The team microinjected CRISPR proteins into multiple immature eggs in the lizard's ovaries that targeted the tyrosinase gene.
- ❖ Tyrosinase gene is responsible for pigmentation.
- ❖ They created albino lizard offsprings from normal lizards.
- ❖ CRISPR-Cas9 technology was used by the scientists for this research.



CRISPR

- ❖ CRISPR stands for clustered, regularly interspaced, short palindromic repeats or CRISPR-associated protein 9 (Cas9) (CRISPR-Cas9) system.
- ❖ CRISPR technology is basically a gene-editing technology that can be used for the purpose of altering genetic expression or changing the genome of an organism.
- ❖ Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops.
- ❖ CRISPR raised ethical concerns when manipulating human embryos.

New State of Matter

- ❖ Scientists from the University of Edinburgh, Scotland using powerful computer simulations have discovered the existence of the new state of matter known as the chain-melted state.

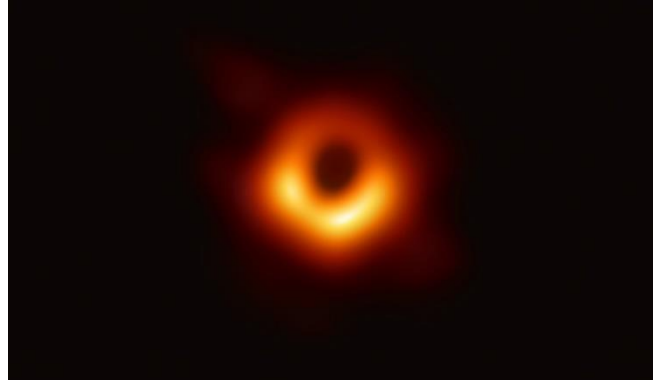


- ❖ At the chain-melted state, atoms are both solid and liquid at the same time.

- ❖ Over half a dozen elements including sodium and bismuth are thought to be capable of existing in the newly discovered state.

Black hole - Powehi

- ❖ The first-ever black hole to be photographed has been named "Powehi".

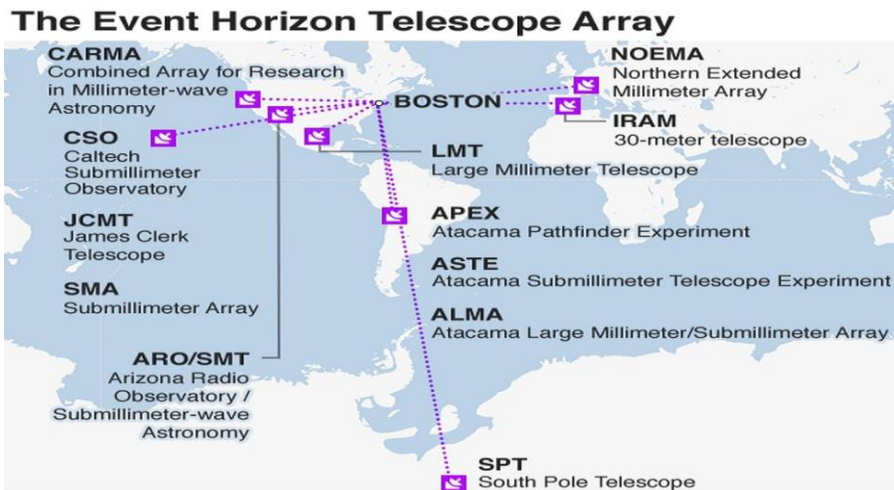


- ❖ The name was given by renowned Hawaiian language professor, Larry Kimura from the Hawaiian word "Kumulipo".
- ❖ It lies at the center of the largest galaxy Messier 87, which is about 54 million light-years away.
- ❖ Scientists have obtained this image of a black hole using Event Horizon Telescope observations.

Event Horizon Telescope

- ❖ The Event Horizon Telescope (EHT) is an array of eight ground-based radio telescopes forged through international collaboration.
- ❖ EHT used very-long-baseline interferometry (VLBI) technique, a technique that linked and synchronised all the 8 telescopes around the globe.
- ❖ The synchronised telescopes together formed an Earth-sized virtual telescope with unprecedented sensitivity and resolution.
- ❖ EHT array of telescopes

Atacama Large Millimeter Array	James Clerk Maxwell Telescope
Atacama Pathfinder Experiment	Large Millimeter Telescope
Heinrich Hertz Submillimetre Telescope	South Pole Telescope
IRAM 30m telescope	Sub-Millimeter Array



Black Holes

- ❖ A Black Hole is a region of space which is of immense gravity that nothing can escape from it.
- ❖ Even light does not escape after entering black hole.
- ❖ Black holes are formed at the end of some stars' lives.

Homo luzonensis

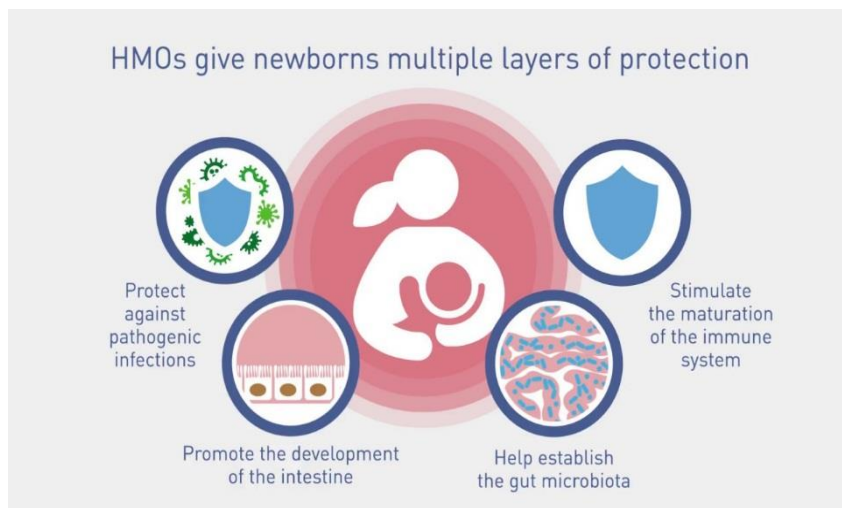
- ❖ Scientists have identified a new human ancestor species previously unknown to science in a cave on the island of Luzon in the Philippines.



- ❖ The fossils unearthed suggests that the small-bodied hominin were less than 4 feet tall and most likely walked upright.
- ❖ The new species has been named Homo luzonensis.
- ❖ The discovery of Homo luzonensis supports the growing body of evidence that human evolution is not as linear as was once thought.

Adult Super Food

- ❖ Global chemical giants DowDuPont and BASF are investing millions to ramp up production of Human milk oligosaccharide (HMO), a component to make superfoods for adults.³



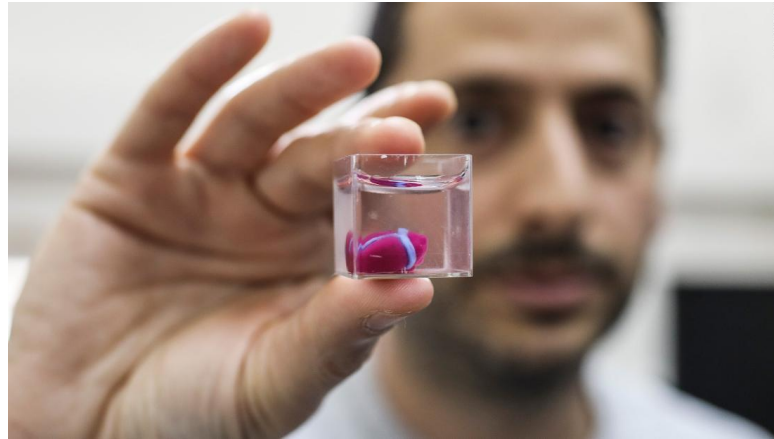
- ❖ HMO is the indigestible sugar found naturally in breast milk.
- ❖ HMO escapes digestion, allowing it to reach the colon where it feeds beneficial bacteria thereby ensuring better health of breast-fed babies.

First 'Cold Spray' SMART lab

- ❖ Madras (IIT-M) announced its collaboration with American conglomerate General Electric (GE) to set up a lab that will develop advanced services technology for aircraft engine components.
- ❖ The 'Cold Spray' SMART (Surface Modification and Additive Research Technologies) Laboratory is the first-of-its-kind being installed in any academic institute in India.
- ❖ It is an emerging technology for advanced manufacturing and services and will be utilised to co-develop processes for aero-engine applications.
- ❖ Cold spray technology is different from other widely used thermal spray processes in that there is no melting and oxidation of powders.
- ❖ Thus, high quality coatings can be produced.

3D Printed Heart

- ❖ Scientists in Israel created a 3D print of a heart with human tissue and vessels which is being hailed as a first and a “major medical breakthrough”.



- ❖ To print a human heart the scientists used a “personalized hydrogel” extracted from fatty tissues of human test subjects and prepared the “bioinks”.
- ❖ This is the first time anyone has successfully engineered and printed an entire heart replete with cells, blood vessels, ventricles and chambers.

Beneficial Bacteria

- ❖ Scientists have discovered a unique oil eating bacterium in the Mariana Trench.
- ❖ This hydrocarbon degrading bacteria eats compounds similar to those in oil.
- ❖ These bacteria can help in finding sustainable ways to clean up oil spills.



Mariana Trench

- ❖ It is located in the western Pacific Ocean approximately 200 km east of the Mariana Islands.
- ❖ It has the deepest natural trench in the world known as the Challenger Deep (10,994 metres).



Anti-Vaccine Campaign

- ❖ According to the World Health Organization (WHO) analysis, Measles cases worldwide rose by 300% during the first three months of 2019 compared with the same period last year.
- ❖ The exponential rise in the disease is attributed to growing concerns over the impact of anti-vaccination campaigns, particularly spread through social media.
- ❖ The criteria to declare an area or a particular geography measles free is:

Criteria	Status
Absence of endemic measles virus transmission in a region for more than 12 months	ELIMINATED
Transmission is sustained continuously for more than a year.	NOT ELIMINATED

Digital Health Technology guidelines

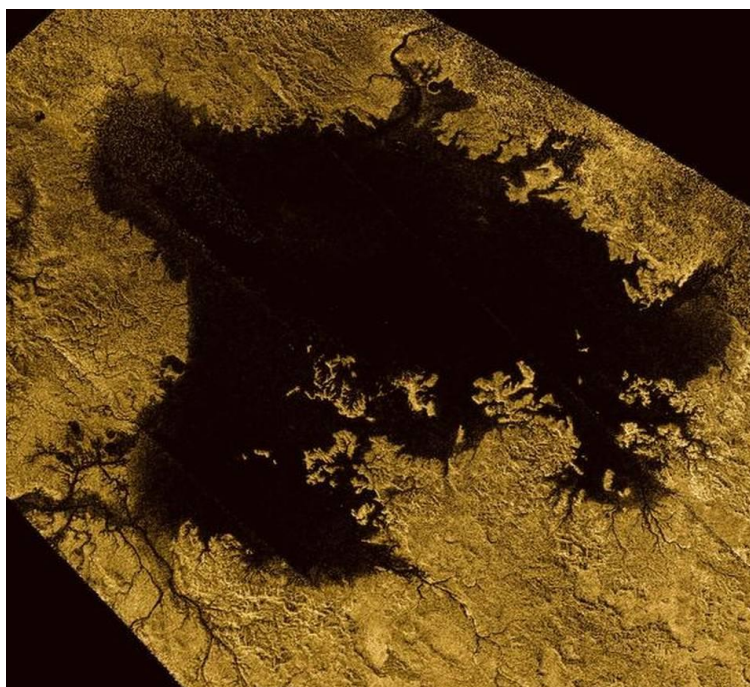
- ❖ The World Health Organization (WHO) on April 17, 2019, released new recommendations on 10 ways that countries can use digital health technology.
- ❖ It aims to make health services accessible via mobile phones, tablets and computers, to improve people’s health and essential services.
- ❖ The guidelines emphasise the importance of reaching vulnerable populations and ensuring that digital health does not endanger them in any way.

HD 21749c

- ❖ NASA's TESS has detected a new exoplanet called HD 21749c.
- ❖ TESS - Transiting Exoplanet Survey Satellite
- ❖ The newly identified exoplanet is 52 light years away, orbiting a star called HD 21749.
- ❖ The star also hosts a second planet HD 21749b
- ❖ HD 21749b has about 23 times Earth's mass and a radius of about 2.7 times Earth's
- ❖ HD 21749c is roughly the size of Earth and orbits the star in just 7.8 Earth days.

Methane lake – Saturn

- ❖ Saturn's largest moon is called Titan
- ❖ Titan has small liquid lakes that run more than 100 metres deep.
- ❖ According to scientists Ligeia Mare - the second largest known body of liquid on Titan is filled with Methane.
- ❖ The data is provided by NASA's Cassini spacecraft
- ❖ Titan and Earth are the solar system's two places with standing bodies of liquid on the surface.



- ❖ Titan has a diameter of 5,150 km It is the solar system's second largest moon
- ❖ Jupiter's Ganymede is the largest moon in solar system.

GSLV-Phase 4

- ❖ The Union Cabinet has approved the continuation of the ongoing Geosynchronous Satellite Launch Vehicle (GSLV) programme phase-4.
- ❖ GSLV Phase-4 has five rocket flights during 2021-2024.
- ❖ The continuation programme will meet the demand for the launch of satellites at a frequency up to two launches per year.
- ❖ The GSLV continuation programme was initially sanctioned in 2003
- ❖ The GSLV continuation programme is expected to meet the launch requirement of satellites for critical satellite services and India's future space missions.

Helium hydride ion HeH⁺

- ❖ Scientists have detected the most ancient type of molecule in our universe in space for the first time ever.
- ❖ Falling temperatures in the young universe allowed recombination of the light elements produced in the Big Bang.
- ❖ At that time, ionized hydrogen and neutral helium atoms reacted to form HeH⁺.

Genome Sequencing

- ❖ Two labs of Council of Scientific and Industrial Research (CSIR) have initiated a genome sequencing project.
- ❖ They are
 - Centre for Cellular and Molecular Biology (CCMB)
 - Institute of Genomics and Integrative Biology (IGIB)
- ❖ They have planned to sequence at least 10,000 Indian genomes.
- ❖ Genomes will be sequenced based on a blood sample.
- ❖ The project serves two purposes
 - Educating students on the “usefulness” of genomics
 - To determine unique genetic traits of the citizens and their susceptibility (and resilience) to disease.

Asteroid-Walloping Mission

- ❖ NASA has announced that SpaceX will fly its Double Asteroid Redirection Test (DART) planetary-defence mission.

- ❖ DART planetary-defence mission will be will launched by the Falcon 9 rocket from California in June 2021.
- ❖ The spacecraft will slam into “Didymoon,” the 540-foot-wide (165 meters) satellite of the near-Earth asteroid Didymos which is located at about 4 million miles from Earth in October 2022.



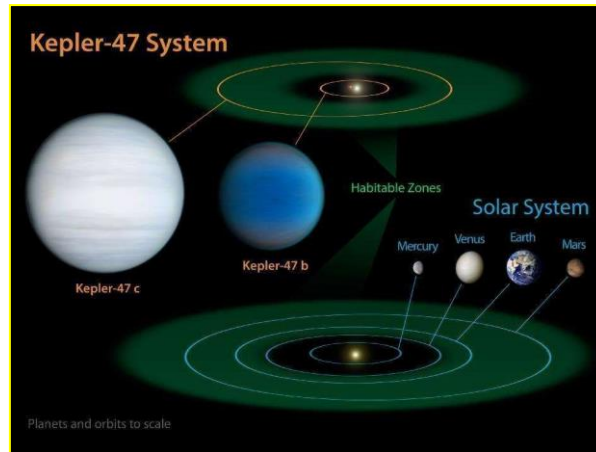
- ❖ After this mission, in 2023, European mission called “Hera” would launch toward the Didymos system and get there in 2026.
- ❖ Recently, Japan’s Hayabusa 2 probe smashed a copper cannonball into the space rock Ryugu, to unearth pristine subsurface material for study.

Kepler-47 system

- ❖ Astronomers have discovered a third planet in the Kepler-47 system, this new planet named as Kepler-47d.
- ❖ Using data from NASA’s Kepler space telescope, they detected the new Neptune-to-Saturn-size planet orbiting between two previously known planets Kepler-47b and Kepler-47c.
- ❖ According to a new study, Kepler-47d is about seven times larger than Earth and also the largest of the three planets in the Kepler-47 circumbinary system.

Kepler-47 system

- ❖ The Kepler-47 system is approximately 3.5 billion-years-old and it is 3,340 light years away in the direction of the constellation Cygnus.



- ❖ After the discovery of Kepler-47d, now there are three planets in Kepler-47, that are orbiting two suns.
- ❖ Kepler-47 is binary star system and only known multi-planet circumbinary system.
- ❖ Circumbinary planets are those that orbit two stars.

First armed amphibious drone boat

- ❖ The world's first armed amphibious drone boat named "Marine Lizard" has been successfully tested by China.
- ❖ It is guided by China's BeiDou Navigation Satellite System.
- ❖ It has a capability of forming a combat triad with aerial drones and other drone ships, it could be used in land and sea assault operations.



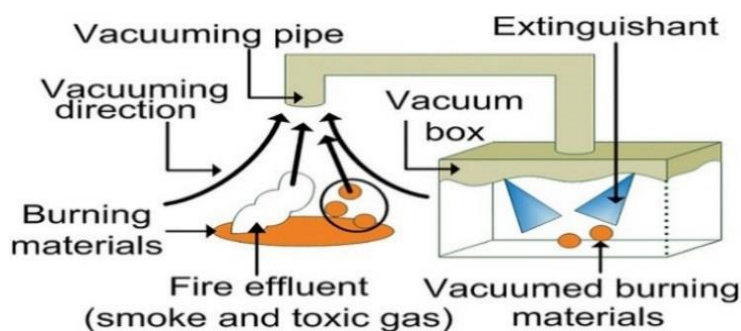
- ❖ The drone can autonomously sail, avoid obstacles, plan routes and its payloads include an electro-optical system and a radar system.

Electricity from snowfall

- ❖ The researchers at the University of California, created a 3D-printed device that that can produce electricity from falling snow.
- ❖ The device is small, inexpensive, thin, flexible like a plastic-sheet and can work anywhere because it provides its own power and does not need batteries.
- ❖ The device termed as snow-based triboelectric nanogenerator or “snow TENG”.
- ❖ It generates charge through static electricity and produces energy from electron-exchange.

Unique Fire Extinguisher

- ❖ Scientists have developed a novel fire extinguisher that sucks in the flame as well as the combustion products.



- ❖ The Vacuum Extinguish Method (VEM) is designed by researchers at the Toyohashi University of Technology in Japan.
- ❖ It will be suitable for the special environments that are highly enclosed such as space vehicles and submarines.

Mars Quake

- ❖ National Aeronautics and Space Administration’s (NASA) InSight lander spacecraft has detected what is widely believed to be a “mars quake” in the Mars planet.
- ❖ NASA’s InSight stands for Interior Exploration using Seismic Investigations, Geodesy and Heat Transport.
- ❖ It is the first outer space robotic explorer to study in-depth the “inner space” of Mars.
- ❖ Studying these internal structures will aid in answering the early formation of rocky planets in our inner solar system.

Quantum Thermometer

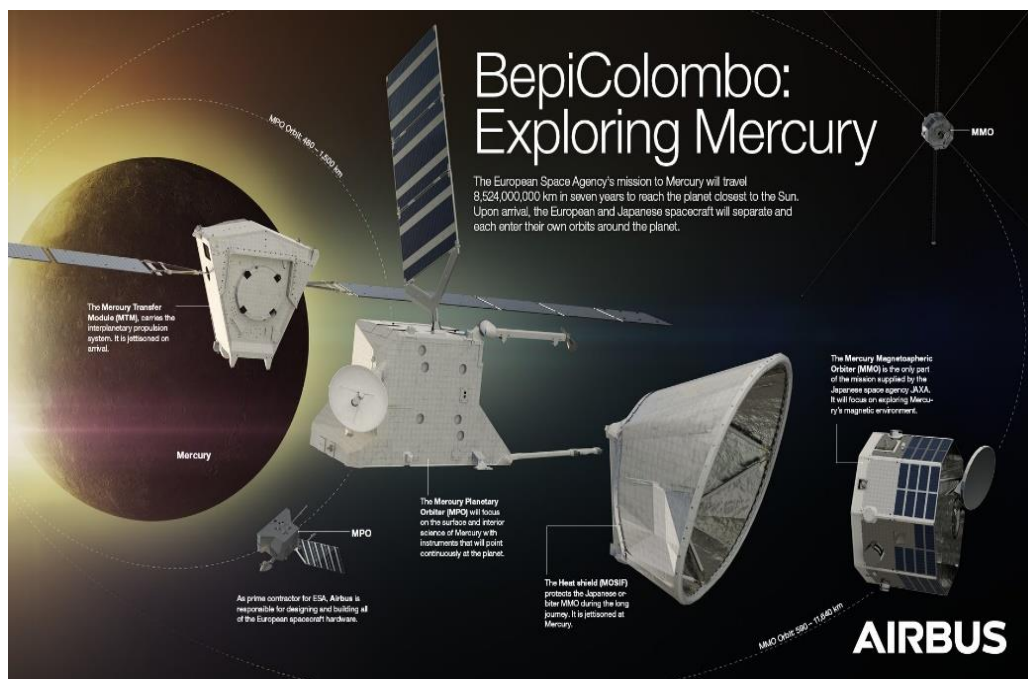
- ❖ Researchers at Jamia Millia Islamia University, New Delhi, have developed an ultrasensitive quantum thermometer.
- ❖ It can measure micro Kelvin changes in temperature and has quick response time.
- ❖ This ultrasensitive quantum thermometer has been developed using graphene quantum dots (GQDs).

Graphene Quantum Dots

- ❖ Graphene quantum dots (GQDs) refers to miniscule fragments, limited in size, or domains, of single-layer to tens of layers of graphene.
- ❖ GQDs are used in biological, opto-electronics, energy and environmental applications.

BepiColombo

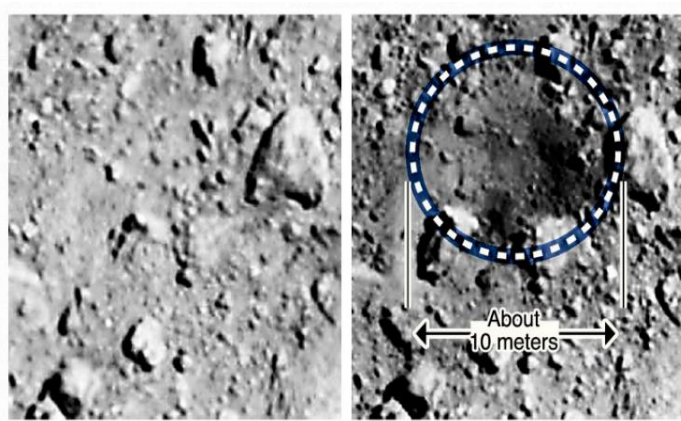
- ❖ European and Japanese space agencies announced that an Ariane 5 rocket successfully lifted a BepiColombo spacecraft into orbit.



- ❖ It is a joint mission to Mercury.
- ❖ The spacecraft is named after Italian scientist Giuseppe “Bepi” Colombo.
- ❖ BepiColombo will release two probes that will independently investigate the surface and magnetic field of Mercury.
 - Bepi, developed by European Space agency
 - Mio, developed by Japan Aerospace Exploration Agency’s (JAXA)

1st artificial crater on asteroid

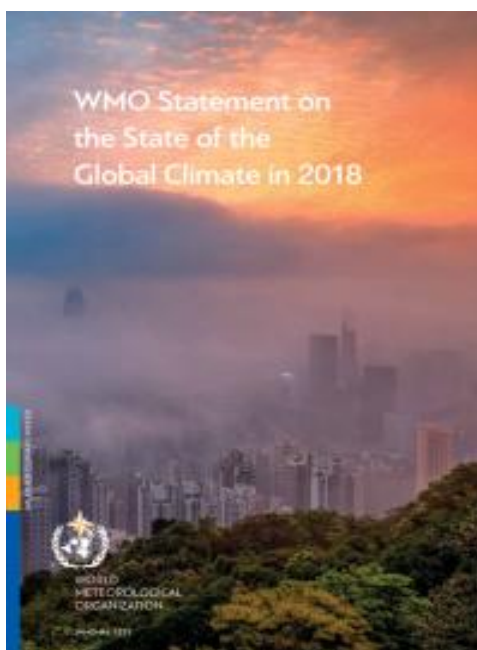
- ❖ Japanese scientists have successfully created the first-ever artificial crater on an asteroid.
- ❖ It would give some clue on how the solar system evolved.
- ❖ The baseball-sized explosive released by the Hayabusa 2 spacecraft managed to knock a considerable hole in the asteroid.
- ❖ Hayabusa 2 space probe shot a projectile at the Ryugu asteroid around 340 million kilometres from Earth.
- ❖ It aims to explore the origin of life and the evolution of the solar system.
- ❖ The mission was launched in December 2014 and is scheduled to return to Earth with its samples in 2020.



ENVIRONMENT

State of the Global Climate

- ❖ World Meteorological Organisation has published a report - 'State of the Global Climate 2018'.
- ❖ This publication marks the twenty-fifth anniversary of the WMO Statement on the State of the Global Climate, which was first issued in 1994.
- ❖ Key findings of this report include the continuous upward trend in the atmospheric concentration of the major greenhouse gases, the increasing rate of sea-level rise and the loss of sea ice in both northern and southern polar regions.



Fourth UN Environment Assembly

- ❖ The fourth UN Environment Assembly (UNEA) meet was held at Nairobi, Kenya.
- ❖ The theme for UNEA-4 was “Innovative solutions for environmental challenges and sustainable consumption and production”
- ❖ Estonia was the President of UNEA-4.
- ❖ UNEA is the world’s highest-level decision-making body on the environment.
- ❖ It addresses the critical environmental challenges facing the world today.
- ❖ The UNEA was created in June 2012.
- ❖ This conference is popularly referred to as RIO+20.
- ❖ The first and second UNEA sessions tackled and adopted resolutions on major issues of illegal trade in wildlife, air quality, environmental rule of law, financing the Green Economy and the Sustainable Development Goals.
- ❖ The third UNEA session took place in Nairobi under the overarching theme “Towards a pollution-free planet”.
- ❖ The UN Environment Assembly which is composed of 193 Member States holds its sessions biennially.

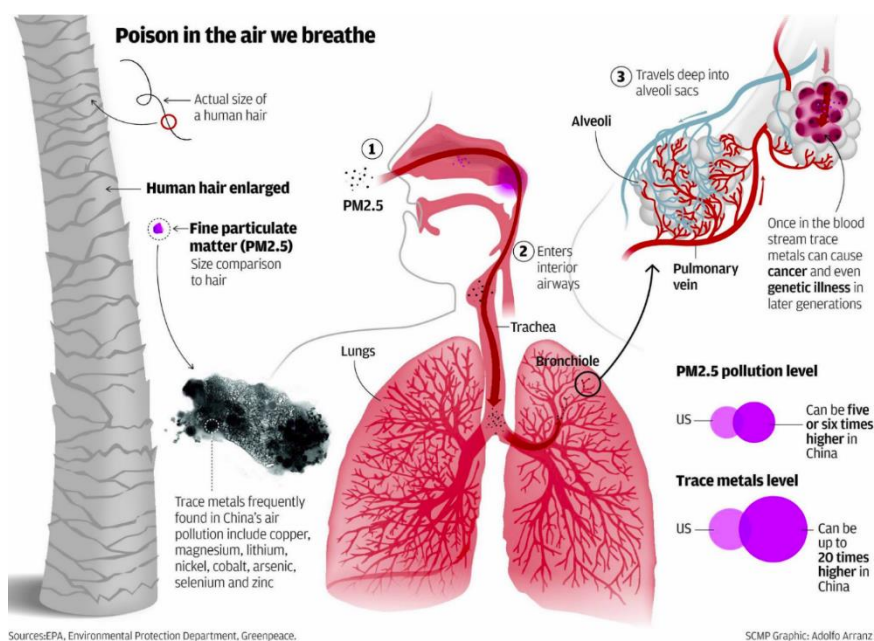
State of Global Air 2017

- ❖ Exposure to outdoor and indoor air pollution contributed to over 1.2 million deaths in India in 2017 according to the report ‘State of Global Air’.

- ❖ This report is released by Health Effects Institute, an independent, non-profit US based research institute.
- ❖ The study reports that the life on average of a South Asian child growing up in current high levels of air pollution will be shortened by 2 years and six months.
- ❖ A majority of Air pollution deaths are directly attributed to PM2.5, half of which are generated from India and China together.
- ❖ Fossil fuel generated emissions are responsible for about 65 per cent of premature deaths from human-made air pollutants worldwide.
- ❖ India has initiated major steps to address air pollution and pollution sources like
 - The Pradhan Mantri Ujjwala Yojana
 - Accelerated Bharat Stage VI clean vehicle standards
 - National Clean Air Programme.

PM 2.5

- ❖ PM2.5 refers to atmospheric particulate matter (PM) that have a diameter of less than 2.5 micrometres.
- ❖ These particles can be detected only with an Electron Microscope.
- ❖ This increases the chances of humans and animals inhaling them into the bodies.
- ❖ Fine particles are known to trigger or worsen chronic disease such as asthma, heart attack, bronchitis and other respiratory problems.



e-Waste Economy

- ❖ International Finance Corporation (IFC), a member of the World Bank group organised a conference on “e-Waste Management in India: The Way Forward”.
- ❖ The significant potential of e-waste to contribute to the country's economy and generate employment was highlighted.



- ❖ The electronic waste sector is expected to create 4.5 lakh direct jobs by 2025 and another 1.8 lakh jobs in the allied sectors of transportation and manufacturing.
- ❖ Electronic waste or e-waste is discarded electrical or electronic devices.

EURO VI Fuel

- ❖ In addition to Delhi, all the cities in NCR (National Capital Region) and the adjoining Agra city are mandated to run on the clean Euro-VI grade petrol and diesel only.
- ❖ Euro-VI grade fuel contains 10 ppm of sulphur as against 50 ppm in Euro-IV fuels.

Jumping Spiders

- ❖ A team led by arachnologists Rajesh Sanap, Dr. John Caleb and biologist Anuradha Joglekar announced that they had discovered a new species of jumping spiders in Mumbai.
- ❖ The new species has been named *Jerzego sunillimaye*.



- ❖ Spiders are microhabitat specialists and are sensitive to sudden changes in their habitat, which makes them the ideal environment indicators.
- ❖ Spiders are important creatures as they are pest-controllers.
- ❖ They are like the tigers of the microhabitat world.
- ❖ Pulling them out could cause ecological imbalance.
- ❖ Those who study spiders and other arachnids are arachnologists.

Monsoon prediction

- ❖ Skymet, a private weather forecaster, has predicted the likelihood of below-normal rains this year's monsoon season.
- ❖ Indian Meteorological Department has also predicted a weak Southwest monsoon season.
- ❖ The forecaster pegged rainfall in the country during the 2019 monsoon (June-September) at 93%.
- ❖ LPA is defined as the average annual rainfall over a 50-year period.

Level of Rainfall on LPA	Status of Rainfall
Less than 90%	Deficient
96-104%	Average or Normal
90-96%	Below Normal
104-110%	Above Normal
Above 110%	Excess

Komodo Dragon

- ❖ Indonesian authorities are considering banning tourists from Komodo Island, the island home of the ancient Komodo dragon, to allow for conservation efforts and to prevent smuggling.



- ❖ Indonesian islands are the only place in the world where Komodo dragons can be seen in their natural habitat.
- ❖ The IUCN status of Komodo dragons is 'Vulnerable'.

Floating Purification islands

- ❖ Delhi Jal Board had introduced the “purification islands” to soak up pollutants and purify the water in the wetland.
- ❖ The islands are knots of hormone-treated plants.
- ❖ This floating wetland is that the plants on the islands will absorb the nutrients present in the waterbody.
- ❖ This in-house innovation can make water suitable enough to introduce fishes and make the lake ecosystem self-cleaning.



Two new birds in Aralam sanctuary

- ❖ The 19th edition of the bird survey in Aralam Wildlife Sanctuary, spotted two new species of birds.
- ❖ The new species spotted were Woolly-necked stork and White-bellied drongo.
- ❖ Both are dry-land species, and with this the total number of species spotted in the protected area so far has touched 246.

19TH EDITION OF BIRD SURVEY

<ul style="list-style-type: none"> ➤ A total of 152 species were spotted in the three-day survey ➤ The total number of species spotted in the protected area so far has touched 246 ➤ However, there was a reduction in the sighting of the birds this time 	<ul style="list-style-type: none"> ➤ The survey was conducted for three days in five spots inside the sanctuary, and the number of participants was restricted to 30, apart from the sanctuary officials, considering the possibility of forest fire due in peak summer 	 <p>NEWBIES: The new species spotted are Woolly-necked stork (in pic) and White-bellied drongo, both dry-land species</p>
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- ❖ Aralam Wildlife Sanctuary is the northernmost wildlife sanctuary of Kerala and it is located on the western slope of the Western Ghats.

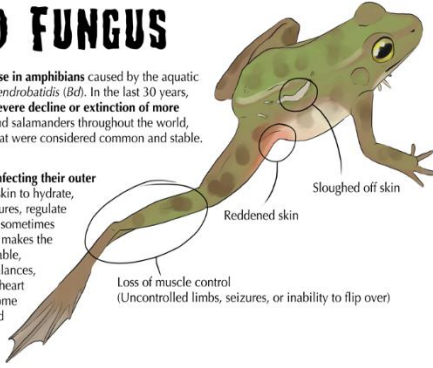
Chytridiomycosis

- ❖ Chytridiomycosis is a deadly contagious disease affecting amphibians.
- ❖ Chytridiomycosis is caused by the fungus “Batrachochytrium dendrobatidis”.
- ❖ The fungus attacks the skin of frogs, toads and other amphibians.

CHYTRID FUNGUS

Chytridiomycosis is a disease in amphibians caused by the aquatic fungus *Batrachochytrium dendrobatidis* (*Bd*). In the last 30 years, *Bd* has been linked to the **severe decline or extinction of more than 200 species** of frogs and salamanders throughout the world, including several species that were considered common and stable.

Bd attacks amphibians by **infecting their outer skin layers**. Frogs use their skin to hydrate, control their body temperatures, regulate minerals and nutrients, and sometimes even breathe. The infection makes the skin thicker and less permeable, resulting in electrolyte imbalances, loss of muscle control, and heart failure. Frogs may also become lethargic and have reddened or sloughed off skin.



Sloughed off skin
Reddened skin
Loss of muscle control (Uncontrolled limbs, seizures, or inability to flip over)

Several treatments have shown promise but there is currently **no cure**. One key may lie in figuring out why some species are more susceptible than others — some species are resistant while others experience **85-100% fatality**.

Alithographica
References: <https://amphibians.org/learn/learn-more-about-bd/>
<http://www.amphibians.org/the-impact-of-bd-fungus/>

- ❖ As the creatures use their skin to breathe and regulate their bodies' water levels, the damage caused by the disease eventually leads to heart failure and death.

- ❖ This is described as the “first global wild disease issue” as it has resulted in complete extinction of 90 species.

Yellow weather warning

- ❖ The Meteorological Department has issued a fresh yellow weather warning for thunderstorm in Himachal Pradesh.
- ❖ The Met office issues colour-coded warnings to alert the public ahead of severe or hazardous weather which has the potential to cause "damage, widespread disruption and/or danger to life.
- ❖ Yellow is the least dangerous out of the weather warnings, it indicates the possibility of severe weather over the next few days that could affect the public.

24x7 pollution charge zone

- ❖ London became the first city in the world to implement a special Ultra Low Emission Zone (ULEZ).
- ❖ It would charge an entry fee for older vehicles if they do not meet the emission standards.
- ❖ This is an attempt to reduce air pollution and protect public health.
- ❖ This ULEZ will be operational for 24 hours and seven days a week.

First carbon-positive village

- ❖ Phayeng Village in Imphal, West district of Manipur has become India’s first carbon-positive settlement.
- ❖ Phayeng Village is a scheduled caste village of the Chakpa community.
- ❖ The residents transformed the village with funding under the National Adaptation Fund for Climate Change (NAFCC), a central scheme to support adaptation to climate change impact in various states.
- ❖ A village is given carbon-positive tag if it sequesters more carbon than it emits, slowing accumulation of greenhouse gases (GHGs) and mitigating effects of climate change.

Zinc Deficiency

- ❖ Rising carbon dioxide levels in the air are causing zinc deficiency in Indian crops reducing the nutritional value of food consumed by Indians.
- ❖ According to the study by the Harvard T H Chan School of Public Health, people living in rice-diet dominated regions of India have inadequate intake of zinc in daily food.

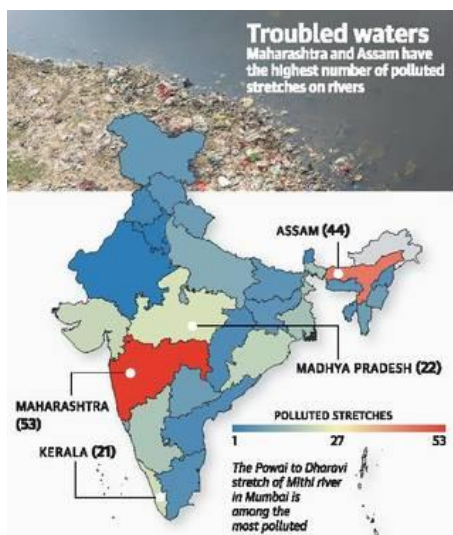
- ❖ The national rate of inadequate zinc intake has increased from 17% to 25% between 1983 and 2012.
- ❖ Zinc deficiency increases the risk of diseases like malaria, diarrhoeal afflictions, and pneumonia, particularly in children.

THE FACE OF DISASTERS 2019

- ❖ According to the report, 'The Face of Disasters 2019', released by the SEEDS, the "average" rainfall figures hide extremes of floods and droughts across the country.
- ❖ The Sustainable Environment and Ecological Development Society (SEEDS) report have found that terms like "Normal rainfall" or "Average Rainfall" used by IMD does not factor in the huge intrastate and countrywide variation in rainfall.
- ❖ It substantiates that during the June to September monsoon of 2018, Punjab experienced a "normal" monsoon.
- ❖ But one region of Punjab (Ropar) received 71% excess rainfall while another region (Ferozepur) experienced a 74% shortage.

Central Monitoring Committee – Polluted Rivers

- ❖ The NGT has formed a Central Monitoring Committee to prepare and enforce a national plan to make over 350 river stretches across the country pollution free.



- ❖ According to an assessment by the Central Pollution Control Board (CPCB), the most significant stretches of pollution include,
 - Mithi river — from Powai to Dharavi
 - Godavari — from Someshwar to Rahed

- Sabarmati — Kheroj to Vautha
- Hindon — Saharanpur to Ghaziabad

Background

- ❖ The CPCB, since the 1990s, has a programme to monitor the quality of rivers primarily by measuring BOD
- ❖ Biochemical Oxygen Demand - Amount of dissolved oxygen needed by aerobic biological organisms to break down organic material present in water.
- ❖ Higher BOD means the river is worse.

Great Indian Bustard

- ❖ India is the only home of the Great Indian Bustard (*Ardeotis nigriceps*). It is a Critically Endangered species.
- ❖ The National Green Tribunal had directed the Union ministry of environment and forests (MoEF) to submit a 'factual report' on the number of GIB.

BIRD ON A WIRE	
<ul style="list-style-type: none"> ➤ According to the latest population assessment, the largest population of GIB is in Thar area of Rajasthan ➤ Desert National Park which extends from Jaisalmer to Jodhpur is home to 170 GIBs ➤ Five known mortalities in 2017-2018 following electrocution ➤ Five breeding sites left now ➤ National conservation GIB breeding programme involves state governments of Gujarat, 	 <p>Rajasthan, Maharashtra and will be supervised by Wildlife Institute of India (WII)</p> <ul style="list-style-type: none"> ➤ WII team to finalize the size of a GIB hatching facility in Jaisalmer

- ❖ A petition was filed by Centre for Wildlife and Environment Litigation (CWEL) to highlight dangers faced by GIB from Wind power projects and transmission lines in Rajasthan.
- ❖ Only 150 Great Indian Bustards (GIB) were spotted in Rajasthan's Desert National Park (DNP).

Invasive Bull Frog

- ❖ The Indian bull frog (*Hoplobatrachus tigerinus*) which is native to the Indian mainland, has recently invaded the Andaman archipelago.
- ❖ It has grown into a widespread invasive species.
- ❖ It threatens Andaman's local economy and ecosystem by eating native wildlife including fish, lizards and even poultry.



Olive Ridley

- ❖ Approximately 1.25 Lakhs of baby Olive ridley turtles swam into the sea at Kalam Island off the Odisha coast.
- ❖ The olive ridley is classified as “Vulnerable” according to the International Union for Conservation of Nature and Natural Resources (IUCN), and is listed in Appendix I of CITES.

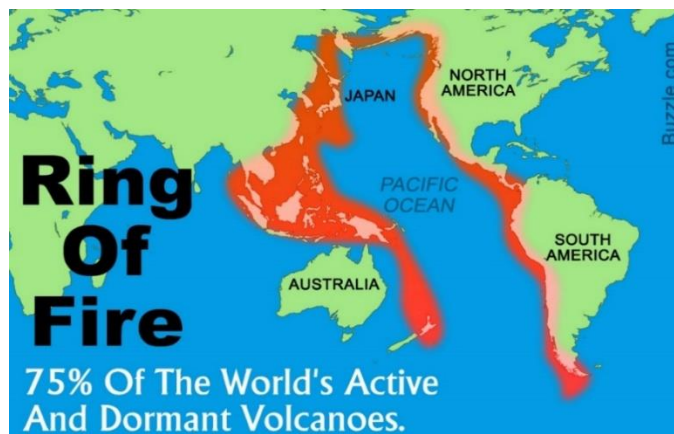


- ❖ The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a multilateral treaty to protect endangered plants and animals.
- ❖ It is also known as the Washington Convention.
- ❖ CITES entered into force on 1 July 1975.
- ❖ The following are the major nesting grounds of Olive ridley turtle in India

Gahirmatha beach	Astaranga coast
Beach of Rushikulya River	Devi River mouth
Andhra Pradesh	Hope Island of Coringa Wildlife Sanctuary

Bali Volcano

- ❖ Mount Agung the active volcano of Bali, Indonesia has erupted again, spewing volcanic ash into the sky to a height of 2km.
- ❖ Mount Agung is also located along the Pacific Ring of Fire.
- ❖ The horseshoe-shaped Ring of Fire, which is 25,000 miles-long, is known for its chain of volcanoes.
- ❖ The Ring is also said to be the location for 90 per cent of the world's earthquakes.



New Bird spotted

- ❖ A recent study published in the journal Birding ASIA mentions the sighting of Horsfield's Bronze Cuckoo bird.
- ❖ It was spotted on the Great Nicobar Island of the Andaman and Nicobar island chain.
- ❖ It is a native of Australia and New Guinea.



- ❖ The sighting was the first recorded instance of the bird in India.
- ❖ Andaman and Nicobar Islands, with just about 0.25 % the country's landmass, is home to about 350 species of exotic birds.

Peatlands

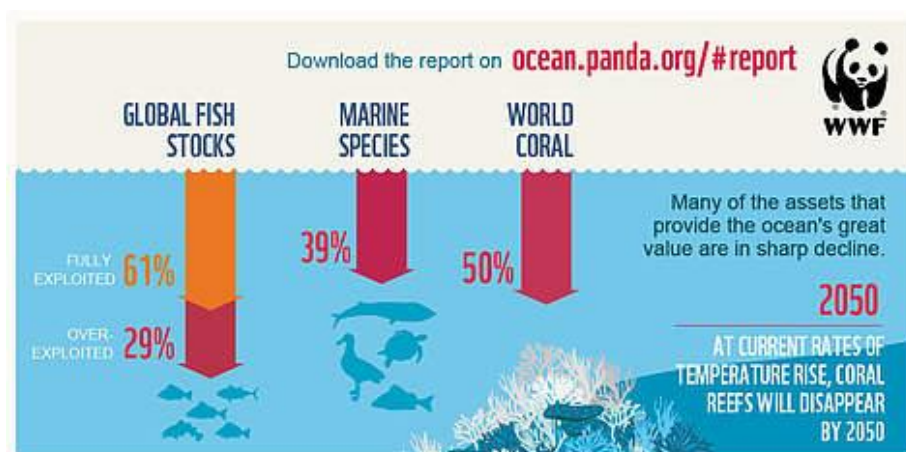
- ❖ The recent United Nations Environment Assembly in Nairobi, Kenya, has adopted its first ever resolution on peatlands.
- ❖ It aims to give an impetus to conservation and restoration efforts.
- ❖ Peatlands are a type of wetlands.
- ❖ It refers to the peat soil and the wetland habitat growing on its surface.

Penguin Colony

- ❖ Halley Bay site in Antarctica, the world's second-largest penguin colony, has almost disappeared.
- ❖ Researchers from the British Antarctic Survey (BAS) reported death of thousands of penguin chicks.
- ❖ Most of the penguin chicks drowned when "sea ice" in Antarctica's Weddell Sea was destroyed by storms in 2016.
- ❖ Climate change induced recurring storms in 2017 and 2018 nearly destroyed almost all chicks at this site.

Marine Eco System

- ❖ A study by Rutgers University in the US calculated the coolest temperatures available to each species during the hottest parts of the year.
- ❖ It found that marine species are two times more likely to be wiped out due to global warming than life on land.
- ❖ Land animals can hide from the heat in forests, shaded areas or underground but marine organism have no escape mechanism.
- ❖ The greater vulnerability of sea creatures may significantly impact human communities who rely on fish and shellfish for food and economic activity.



Permafrost

- ❖ According to a new study published in Nature Communications, the Arctic's thawing permafrost will release methane and carbon dioxide.
- ❖ This may hugely accelerate global warming and cost the world trillions of dollars in damages.
- ❖ Permafrost is any ground that remains completely frozen (32°F or 0°C) or colder for at least two years straight.
- ❖ A layer of soil on top of permafrost does not stay frozen all year.
- ❖ This layer, called the 'active layer', thaws during the warm summer months and freezes again in the fall.

Kakapo Parrot

- ❖ Kakapo sirocco, world's fattest parrot, is a critically endangered parrot species in New Zealand.
- ❖ In this breed, the females control the breeding process.



- ❖ They mate every two to four years when New Zealand's native Rimu trees are full of fruit.
- ❖ 249 eggs have been laid in a single season by the parrot.

95 million-year-old crab species

- ❖ Alberta University palaeontologists have discovered 95 million-year-old coin-sized 'cartoon-eyed' crab species called Callichimaeraperplexa.
- ❖ It is believed that the crab is from mid-cretaceous period & it must have hailed from what is now Colombia, Northern Africa & Wyoming.
- ❖ It is a small pocket-size crab had a tiny lobster-esque shell; legs flattened like oars & huge, & Pound Puppies' eyes that projected from its head.



First plastic-free flight

- ❖ The UAE's Etihad Airways has become the first airline in the Gulf region to operate a flight without any single-use plastics on board.
- ❖ It is in a bid to raise awareness about pollution on Earth Day.
- ❖ This is the part of Etihad's pledge to reduce single-use plastic usage by 80 per cent not just in-flight, but across the entire organisation by the end of 2022.

Air Pollution

- ❖ The Union Environment Ministry has constituted a committee to implement the National Clean Air Programme (NCAP).
- ❖ It aims to reduce particulate matter (PM) pollution by 20%-30%.
- ❖ It targets at least 102 cities by 2024.
- ❖ NCAP is planned as a 5-year action plan.
- ❖ 2019 is the first year of the plan.

STATE

App for first-time voters

- ❖ The district administration of Bongaigaon in Assam has developed a 'Sankalp' mobile phone application to especially reach out to the first-time voters.
- ❖ This has been developed by the Assam's Bongaigaon district administration team with the help of NIC (National Informatics Centre) to encourage the first-time voters.
- ❖ They will also be able to sign a digital 'sankalp patra', promising to cast their votes on the day of polling.

Ballot Paper in Braille

- ❖ For a first in Meghalaya, the Election Commission will facilitate more than 800 visually impaired electorates to vote by a secret ballot.
- ❖ Election Commission has made arrangements to issue braille-enabled ballot papers at all polling booths in the state.
- ❖ The ballot paper pasted on the electronic voting machines (EVMs) will have the names and symbol of candidates in braille alphabets.

Mobile methadone vans

- ❖ In a first-of-its-kind initiative, the AIIMS launched mobile methadone vans to provide treatment to opioid addicts in inner city neighbourhoods.
- ❖ As a pilot project, the National Drug Dependence Treatment Centre (NDDTC) of AIIMS has initiated the new service in East Delhi.
- ❖ Currently, such dispensing vans or buses are available in few select developed countries in the world, such as USA, Portugal, Spain, Canada and Netherlands.
- ❖ India is the first country in the South Asian region to initiate these services.



Kandhamal Haldi

- ❖ Odisha's Kandhamal Haldi (turmeric) named after central Odisha district of Kandhamal, gets Geographical Indications (GI) tag.
- ❖ Kandhamal Haldi is famous for its healing properties and for high curcumin content which is used in pharma industries.
- ❖ Turmeric is the main cash crop of tribal people in Kandhamal.
- ❖ The leaf of Kandhamal turmeric is mainly used in an Odia cuisine "Enduri Pitha" which gives a pungent flavour and taste to the dish.
- ❖ Odisha has so far received GI Tag for 15 of its items, including two agricultural products.



Café Scientific

- ❖ A group of science experts of the Hume Centre for Ecology and Wildlife Biology, Wayanad, Kerala are planning to launch 'Café Scientific'.
- ❖ It is an initiative to make science relevant, powerful and important to the public, especially the younger generations
- ❖ Café Scientific is a grassroots public science initiative based on the popular French Café Philosophique model.

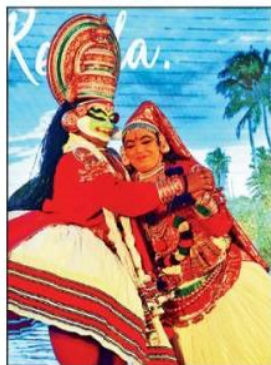
West Bengal

- ❖ The National Green Tribunal has directed the West Bengal state government to submit a quarterly report on the issue of solid waste management.
- ❖ According to the green panel, the state only treats 49 percent of the wastewater before dumping it into the Ganga River.

Kerala Tourism

- ❖ Kerala Tourism has tied up with Manchester City in UK for a long-term cultural exchange programme.

CULTURAL EXCHANGE



- Project to focus on state's heritage-preserving and community-centred Responsible Tourism (RT) initiatives
- Three from the state have been invited to participate in the Manchester

Day celebrations

- State's RT activities attracted Manchester
- RT got Golden Award at the World Travel Market at London earlier this year

- ❖ The agreement will focus on the state's heritage-preserving and community-centred Responsible Tourism (RT) initiatives.

Kerala

- ❖ 22-year-old Sreedhanya Suresh from Kerala's Wayanad district became the first tribal girl (Kurichiya Community) from Kerala to clear the civil service examinations.
- ❖ She secured the 410th rank in the examination.



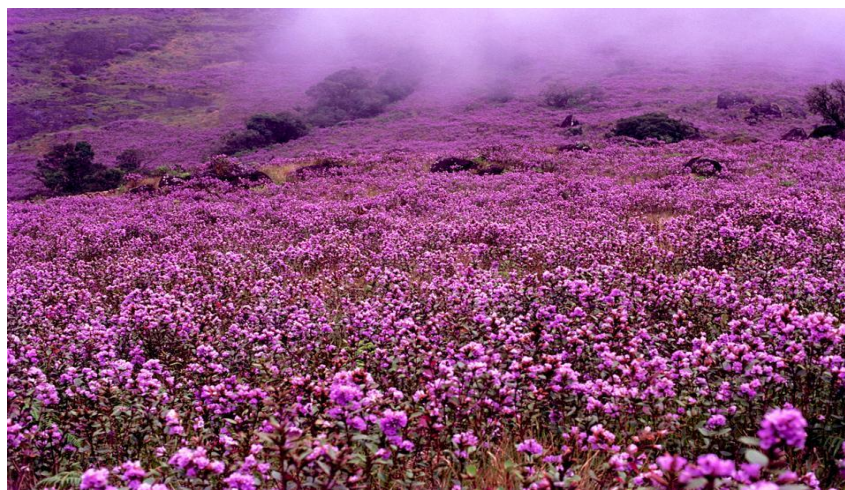
Arunachal Pradesh

- ❖ The Indian Army has recovered a wreckage of a World War II vintage US Air Force aircraft in Roing district, Arunachal Pradesh.
- ❖ Over 400 American soldiers are believed to have gone missing in aircraft crashes while crossing 'The Hump' from India to China.
- ❖ The Hump, over the Himalayas, was the main supply route between India and China during World War II, after Myanmar was captured by Japanese troops.



Neelakurinji Blossom

- ❖ A massive forest fire has eroded the forest lands of the Neelakurinji Sanctuary in Vattavada and Pampadum Shola National Park in Munnar, Kerala.
- ❖ Kerala forest officials suspect that the fire was man-made and deliberate.
- ❖ Kurinji or Neelakurinji (*Strobilanthes kunthianus*) is a shrub that is found in the shola forests of the Western Ghats in South India.
- ❖ Nilgiri Hills, which literally means the blue mountains, got their name from the purplish-blue flowers of Neelakurinji that blossoms only once in 12 years.



- ❖ It is the most rigorously demonstrated, with documented bloomings in 1838, 1850, 1862, 1874, 1886, 1898, 1910, 1922, 1934, 1946, 1958, 1970, 1982, 1994, 2006 and 2018.
- ❖ The Paliyan tribal people living in Tamil Nadu used it as a reference to calculate their age.
- ❖ Kurinjimala Sanctuary protects the approximately 32-hectare core habitat of the endangered Neelakurinji plant in Idukki district of Kerala State.

Periyar Discoloration

- ❖ The Periyar River in Kerala has turned black near the Pathalam Regulator cum Bridge.
- ❖ The discoloration was due to the poor quality of water as a result of eutrophication.
- ❖ When excessive nutrients reach the waterbody, it will lead to algal bloom.
- ❖ A few days later, algae will die and decay, resulting in a foul smell and discoloration of water.
- ❖ Industrial effluents and household drains are equally responsible for this pollution.

Periyar River

- ❖ Periyar is the longest river and the river with the largest discharge potential in Kerala.
- ❖ Its major tributaries are - Mullayar River, Muthirapuzha River, Cheruthoni River, Perinjankutti River and Edamala River.

Mullaperiyar dam

- ❖ The Mullaperiyar dam is constructed at the confluence of the Periyar and Mullayar to create the Periyar Thekkady lake and reservoir.
- ❖ Water from here is diverted to Tamilnadu via a tunnel. The diverted water is used to generate power.
- ❖ Then it is let into the Suruliar river (a tributary of the Vaigai River) thereby resulting in an inter-basin transfer of water.
- ❖ The dams falling within Tamil Nadu in the Periyar basin are the Upper Nirar Weir and the Lower Nirar Dam.
- ❖ Mullaperiyar dam was constructed between 1887 and 1895 by John Pennycuik.
- ❖ Kerala's largest hydroelectric power project Idukki Dam lies on Periyar river.

Konyak Dance

- ❖ Around 4,700 Konyak Naga women came together and have danced to set a Guinness World Record for the "Largest Traditional Konyak Dance".
- ❖ Konyak is one of the 16 Naga tribes and people of this community live mainly in the Mon district of Nagaland.



- ❖ The official attempt to make the record was made during the Konyak Aoleang-cum-Mini Hornbill Festival in Nagaland.

Andhra Pradesh

- ❖ Supreme Court Collegium has recommended Allahabad High Court Judge Vikram Nath as the first Chief Justice of Andhra Pradesh High Court.

WSIS Awards

- ❖ Two projects of West Bengal Government, “Utkarsh Bangla” and “Sabooj Sathi” have won the World Summit on the Information Society (WSIS) awards under the aegis of the United Nations.
- ❖ WSIS Prizes is an international contest to recognise individuals, governments and private bodies for implementing development-oriented strategies by leveraging the power of information and communication technology.
- ❖ The contest was first held in 2012.

Utkarsh Bangla

- ❖ It got the topmost award and emerged a winner in Capacity Building category.
- ❖ It is a project for skill development training for increasing employment opportunities for 6 lakh youth every year.

Sabooj Sathi

- ❖ It ranked in the first five as a champion project under ICT application: E-Government category.
- ❖ Under it, nearly 1 Crore bicycles have been provided to school going students in classes IX to XII.

M3 version of EVMs

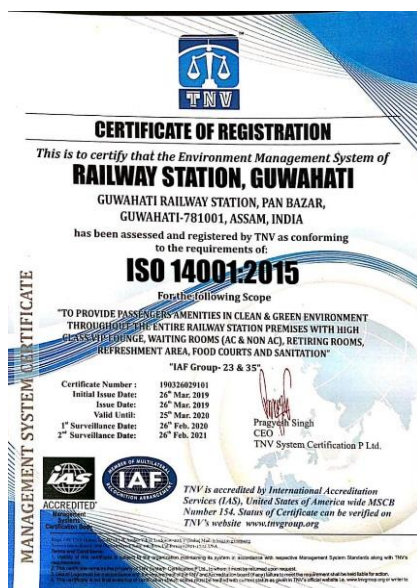
- ❖ Election Commission of India has used the M3 EVMs to accommodate a whopping 185 candidates in contention at the Nizamabad parliamentary constituency of the Telangana.
- ❖ Also, the Election officials have approached the Guinness Book of records to recognise the usage of large number of Electronic Voting Machines (EVM) in a constituency.
- ❖ Total of 12 EVMs in each polling station was linked to one control unit in each of the 1,778 polling centres.
- ❖ It became the first constituency in the country to witnessed polling with EVMs for a large number of candidates (185 candidates).

M3 version EVMs

- ❖ This new M3 version EVMs, came after 2013, with a maximum capacity of 384 candidates including NOTA.
- ❖ It has an additional feature like Tamper Detection and Self Diagnostics.
- ❖ This was developed by the Electronics Corp of India Ltd (ECIL) and Bharat Electronics Ltd (BEL).

1st ISO Certified Railway Station

- ❖ Assam's Guwahati Railway Station has become the first ever railway station in the Indian Railways to get an ISO certification.
- ❖ This certification is given by the National Green Tribunal (NGT) for "providing passenger amenities in a clean and green environment".
- ❖ Many types of ISO (International Organisation for Standardisation) certification exist and the one received by Guwahati Railway Station is ISO-14001.
- ❖ It is for Environment Management System as per international norms which were upgraded in 2015. Thus, the station's certificate reads ISO 14001: 2015.



Chenchu Tribes

- ❖ The Chenchu tribal families have succeeded in domesticating the fox, who believe that the fox brings in good fortune.
- ❖ But the conservation of fox falls under the Indian Wildlife Protection Act 1972, according to which hunting or domesticating it is an offense.
- ❖ Chenchus are a Particularly Vulnerable Tribal Group.
- ❖ They are forest dwellers who spread across four to five districts in Telangana and Andhra Pradesh states.

Interactive Bird Park – Mumbai

- ❖ Essel World has launched an interactive bird park in Gorai (in Mumbai).
- ❖ This is the first bird park in India to host three different varieties of birds – aquatic, terrestrial and free flying birds.



- ❖ It is home to over 400 exotic birds from more than 50 species.

PERSONALITIES, AWARDS AND EVENTS

Pravasi Bharatiya Samman Award

- ❖ RUJ Group's founder and chairman, Dr. Rajendra Kumar Joshi, has been awarded with the Pravasi Bharatiya Samman Award.
- ❖ This award is given for his contributions in the field of science, education and medicine, promoting the honour and prestige of India.
- ❖ The Embassy of India in Switzerland, on behalf of the President of India, handed over a commendation letter and a medal to Joshi.

Pravasi Bharatiya Samman Award

- ❖ Pravasi Bharatiya Samman Award (PBSA) is the highest honour conferred on Non-resident Indians by the President of India
- ❖ It was constituted by the Ministry of Overseas Indian Affairs in 2003.
- ❖ This award recognises their significant contributions towards bringing honour and glory to India.



Peabody Career Achievement award

- ❖ Veteran actor Rita Moreno is set to receive 2019 Peabody Career Achievement honour.
- ❖ The Peabody Career Achievement Award is for individuals whose work and commitment to electronic media has left an indelible mark on the field.

- ❖ The award is presented by Mercedes Benz in the 78th Annual Peabody Awards Ceremony, co-sponsored by Coca-Cola Co.
- ❖ She already has a long list of awards, including an Oscar, a Tony, two Emmys and a Grammy.
- ❖ She is also one of the 15 people to win the coveted EGOT quartet of elite awards.



Global Health Award

- ❖ Vikram Patel, a psychiatrist and professor of global health at Harvard Medical School, has won the prestigious John Dirks Canada Gairdner Global Health Award.
- ❖ Mr. Patel has led research generating knowledge on the burden and determinants of mental health problems in low and middle-income countries.
- ❖ He pioneered approaches which utilise community resources for the prevention and treatment of mental health problems in India with global impact.



Zayed Medal

- ❖ The United Arab Emirates (UAE) on April 4, 2019 honoured PM Narendra Modi with its highest decoration, Zayed Medal.

- ❖ This award was in recognition of PM's "pivotal role" in strengthening ties between the two nations.

Alemba Yimchunger

- ❖ A forest guard of Nagaland named Alemba Yimchunger had been conferred with the 'Earth Day Network Star Award'.
- ❖ The award was given by Earth Day Network, an international environmental NGO based in United States.
- ❖ Yimchunger works as a forest guard at Fakim Wildlife Sanctuary in Kiphire district, Nagaland.
- ❖ He has been honoured with the prestigious award for his efforts in conserving biodiversity in and around the wildlife sanctuary.
- ❖ The Earth Day Network was founded on the first Earth Day on April 22, 1970.

World Bank's New President

- ❖ David Malpass, a top U.S. Treasury official in Trump administration, has been unanimously selected as the new President of the World Bank.
- ❖ Since the bank's creation following World War II, all of its Presidents have been American men.
- ❖ Incidentally any national citizen can become World Bank President, but none have become President till date.

ESPN Multi Sports Award

- ❖ Olympic silver medallist PV Sindhu and star javelin thrower Neeraj Chopra were named as female and male Sportsperson of the Year in the ESPN India Multi sports awards for their achievement in 2018.
- ❖ Jaspal Rana, coach of the Indian shooting Team claimed "Coach of the Year Award" and 2012 Olympic Bronze medallist Saina Nehwal won the award for best "Comeback of the Year".

Maharshi Badrayan Vyas Samman 2019

- ❖ Vice President Venkaiah Naidu conferred President's Certificate of Honour and Maharshi Badrayan Vyas Samman Awards at New Delhi.
- ❖ Dr. Gyanaditya Shakya, a Scholar of Pali has been honoured with the Presidential Award of Maharshi Badrayan Vyas Samman 2019.

Presidential Award of Certificate

- ❖ The award is conferred in recognition of the outstanding contribution of various scholars of eminence over 60 years of age.
- ❖ This award was introduced in the year 1958 to honour the scholars of Sanskrit, Arabic and Persian Languages.
- ❖ Later it was extended to cover Pali/Prakrit, Classical Odiya, Classical Kannada, Classical Telugu, Classical Tamil and Classical Malayalam.

Maharshi Badrayan Vyas Samman Awards

- ❖ This award is conferred on persons in recognition of their substantial contribution in the field of Sanskrit, Persian, Arabic, Pali, Prakrit, Classical Odiya, Classical Kannada, Classical Telugu and Classical Malayalam.
- ❖ The award was introduced in the year 2002.
- ❖ The award is given to selected young scholars in the age group of 30 to 45 years.
- ❖ Both the awards are conferred by the Ministry of Human Resources and Development.

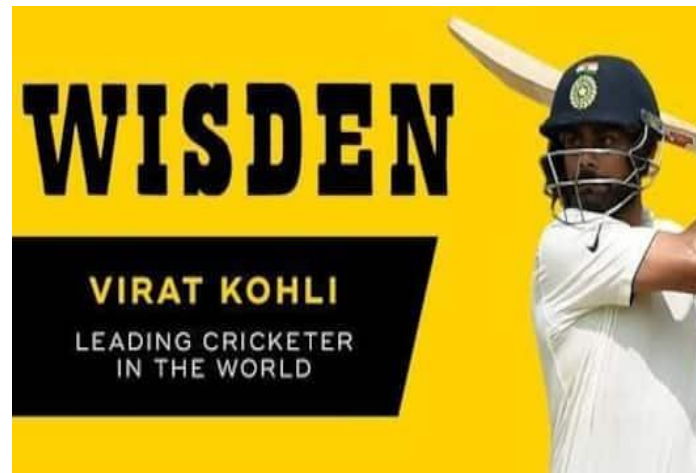
Global Slag Company of the Year

- ❖ Tata Steel has been named as the 'Global Slag Company of the Year' at the 14th Global Slag Conference and Exhibition 2019.
- ❖ The award was presented for its innovative practices in development of new applications for Steel by-products (Slag).
- ❖ The global companies like Arcelor Mittal, CHC Resources Corporation, Contrasteel, Ecocem, Harsco Metals & Minerals, Koryo Slag Cement Co. Ltd and some others also received this award.



Cricketer Kohli

- ❖ Virat Kohli was named as Wisden’s “Leading Cricketer of the Year” for an unprecedented third year in a row.



- ❖ Smriti Mandhana is the Women’s “Leading Cricketer of the Year”.
- ❖ Afghanistan’s Rashid Khan was “Leading Twenty20 Cricketer of the Year” for the second year running.
- ❖ The awards were announced at the 156th edition of the Wisden Cricketers' Almanack.

Wisden Almanack

- ❖ Wisden Cricketers' Almanack or simply Wisden is a cricket reference book published annually in the United Kingdom.
- ❖ Wisden was founded in 1864 by the English cricketer John Wisden (1826–84).
- ❖ Its annual publication has continued uninterrupted to the present day, making it the longest running sports annual in history.
- ❖ In 2012, an Indian edition of Wisden Cricketers' Almanack was launched (dated 2013).
- ❖ Wisden introduced The Cricketer of the Year awards in 1889 to recognise the excellence of players who have performed in England during the previous summer.
- ❖ A player can win this award only once in his life time.
- ❖ The ‘Leading Cricketer of the Year’ honours are only recently given to appreciate international performances, with no restrictions on the number of wins.

Jamia Milia University

- ❖ Professor Najma Akhtar was appointed as the Vice-Chancellor (VC) of Jamia Millia Islamia University.
- ❖ She is the first woman to be appointed as VC of this University.

- ❖ Jamia Millia Islamia University was established at Aligarh in United Provinces, India during British rule in 1920.
- ❖ It became a Central University by an Act of the Indian Parliament in 1988.
- ❖ In Urdu language, Jamia means University, and Millia means National.
- ❖ Abul Kalam Azad, the nationalist leader of the Indian National Congress, was one of its main initial patrons.

Saraswathi Samman Award

- ❖ Telugu poet K Siva Reddy was selected for the prestigious Saraswati Samman Award 2018 for his collection of poetry titled 'Pakkaki Ottigilite'.
- ❖ The award carries a cash prize of 15 lakh rupees, a citation and a plaque.
- ❖ The award was instituted by the KK Birla Foundation in 1991.
- ❖ The award is given annually for an outstanding literary work written in any Indian language and published during the last 10 years.

Deepa Malik

- ❖ Deepa Malik has been named as the recipient of the New Zealand Prime Minister's "Sir Edmund Hillary Fellowship for 2019".
- ❖ She was the first Indian woman to earn a medal at the Paralympic Games.
- ❖ She was the silver medallist in 2016 Rio Paralympics games in shot put event.
- ❖ She is a recipient of Padma Shri and Arjuna Award, including 58 national and 23 international medals.
- ❖ The Fellowship Program has been running since 2008, with an aim to strengthen the relationship between India and New Zealand by showcasing the warm friendship between the two countries.

Freedom of the City of London

- ❖ The Chairman and Managing Director of the General Insurance Corporation (GIC) of India, Alice G. Vaidyan has been awarded the Freedom of the City of London, UK.



- ❖ She was awarded in recognition of her work to promote insurance ties between India and the UK.
- ❖ The Freedom of the City of London recognition dates back to the 13th century.

World Press Photo Awards 2019

- ❖ A photograph of an infant crying helplessly near the US-Mexico border has won the prestigious World Press Photo of the Year award.
- ❖ This image was Captured by Getty Images senior staff photographer John Moore on June 12, 2018 and the image titled "Crying Girl on the Border".
- ❖ This picture shows infant Yanela Sanchez crying as she and her mother, Sandra Sanchez, are taken into custody by US border officials in McAllen, USA.
- ❖ The award was announced by the foundation at a ceremony in Amsterdam, Netherlands.
- ❖ Since 1955 the World Press Photo Contest has recognised professional photographers for the best pictures contributing to the past year of visual journalism.



Pulitzer Prize

- ❖ The Pulitzer Prize is an award for achievements in newspaper, magazine and online journalism, literature, and musical composition in the United States.
- ❖ The New York Times and The Wall Street Journal newspapers were awarded Pulitzer Prizes for their separate investigations of President Donald Trump and his family.
- ❖ It was established in 1917 by Joseph Pulitzer.

Gagandeep Kang

- ❖ Gagandeep Kang has got selected as a fellow of the Royal Society (FRS), London.
- ❖ Ms. Kang has built national rotavirus and typhoid surveillance networks, established laboratories to support vaccine trials and conducted phase 1-3 clinical trials of vaccines.
- ❖ She is the first Indian woman scientist getting selected as FRS in 359 years of history of this prestigious scientific academy.

Fellow of Royal Society

- ❖ FRS is an award granted to individuals that the Royal Society of London judges to have made a 'substantial contribution to the improvement of natural knowledge.
- ❖ It was established in 1603.
- ❖ Some of the famous Indian scientists who were fellows of FRS were

Srinivasa Ramanujan	Mathematics Genius
S.Chandrasekahr	1983 Nobel Prize Awardee
Venkatraman Ramakrishnan	2009 Nobel Prize Awardee

Medal of Honour

- ❖ 150 Indian peacekeeping soldiers serving with the UN Mission in South Sudan (UNMISS) were honored with medals of honor by the UN for their dedicated service and sacrifice.
- ❖ India is one of the top troop-contributing nations to UN Peacekeeping Missions.
- ❖ It is the second largest contributor of peacekeepers to UNMISS with more than 2,400 military and police personnel currently deployed in the mission.
- ❖ UNMISS is working in South Sudan to deter violence against civilians by providing a safe and secure environment for the people.

Goodwill Ambassador - Street Child Cricket

- ❖ Mithali Raj has been named as the goodwill ambassador of the Indian team for the Street Child Cricket World Cup.



- ❖ Mithali joins ex-captain Saurav Ganguly and IPL team Rajasthan Royals in supporting the team.

A.K.Singh - Lifetime Achievement Award

- ❖ Dr A.K.Singh was conferred with Lifetime Achievement Award during 4th APJ Abdul Kalam Innovation Conclave at Chandigarh University, Mohali.
- ❖ Dr A.K.Singh is the director at Life Sciences at Defence Research and Development Organisation (DRDO).
- ❖ The scientist has more than 18 patents and has contributed in more than 57 research publications at an international and national level.
- ❖ He has developed a “Diagnobact” kit, for detection of infectious lesion.
- ❖ He has also introduced and nurtured pharmacosyntigraphy - application of nuclear medicine imaging in drug research.
- ❖ The conclave was organised by the university to mark World Creativity and Innovation Day.

World Creativity and Innovation Day – April 21

- ❖ The United Nations General Assembly had adopted April 21 as World Creativity and Innovation Day in the year 2002.
- ❖ It is celebrated to raise awareness of the role of creativity and innovation in problem-solving and by extension, in the implementation of the Sustainable Development Goals.
- ❖ The day is Observed six days after Leonardo da Vinci’s birthday and one day before International Mother Earth Day.

UNESCO/Guillermo Cano Press Freedom Prize 2019

- ❖ Reuters agency’s journalists, Kyaw Soe Oo and Wa Lone have been selected for UNESCO/Guillermo Cano Press Freedom Prize 2019.

- ❖ This award given for recognizing their commitment, courage and resistance to freedom of expression.
- ❖ Currently, they are serving seven-year prison sentence in Myanmar since 12 December 2017 under the Official Secrets Act.
- ❖ This Prize will be given on May 2nd as part of the observance of World Press Freedom Day (3 May) in Ethiopia.

Global Skill Challenge

- ❖ India has brought home two silver and two bronze medals in Global Skill challenge 2019.
- ❖ The 2019 Global Skills Challenge was conducted in Australia.
- ❖ The competition was conducted by WorldSkills, which organizes the world championships of vocational skills.
- ❖ It is held every two years in different parts of the world.
- ❖ The first competition was held in Madrid, 1950.
- ❖ Worldskills aims to recognize skilled people, show how important skills are in achieving economic growth.

Contestant	Medal	Skill
Sumanth and Manjunatha Desurakara	Silver	Mechatronics
Sanjoy Pramanik	Bronze	Jewellery design
Saurabh Baghel	Bronze	Patisserie and Confectionery

Tagore Literary Prize

- ❖ The second edition of Rabindranath Tagore Literary Prize in ‘Literary’ category was awarded to author Rana Dasgupta for his 2010 novel "Solo".
- ❖ The novel is a tale of estrangement and the ultimate failure of material existence.
- ❖ An amount of \$10,000, a Tagore statue and a certificate for contribution to literature was given to Dasgupta.
- ❖ Japan’s Yohei Sasakawa was chosen for the same award in “Social Achievement” category.
- ❖ He was awarded for his incredible efforts to uproot leprosy and for his great contribution to the world peace.
- ❖ The annually awarded Tagore prize aims for revival of poetry and books that can change lives.

BCM - 95

- ❖ Kochi based Benny Antony has been conferred with the National Intellectual Property (IP) Award for 2019.
- ❖ He was awarded in the category of Top Individual for Patents and Commercialization.
- ❖ He is the inventor of BCM-95, the world's leading patented turmeric extract formulation.
- ❖ Benny has also been awarded the 'WIPO Medal for Inventors' by World Intellectual Property Organisation.

National IP Awards

- ❖ The award is conferred by The Indian Intellectual Property Office.
- ❖ It is given to outstanding innovators, organisations and companies in the field of patents, designs, trademarks and geographical indications.

Arjuna Awards

- ❖ The Board of Control for Cricket in India (BCCI) nominated Mohammad Shami, Jasprit Bumrah, Ravindra Jadeja and Poonam Yadav for the Arjuna award.
- ❖ Arjuna Awards aims to recognize outstanding achievements of sportspersons in the field of sports at international level.
- ❖ It is conferred by Ministry of Youth affairs and Sports.
- ❖ It was established in 1961.
- ❖ Saleem Durani was the first cricketer to receive Arjuna Award.
- ❖ 53 cricketers have so far become Arjuna awardees.

Criteria for Award

- ❖ Good performance over the preceding four years at International level.
- ❖ Should have displayed leadership quality, sportsmanship and discipline.
- ❖ No person can receive it the second time.

National Intellectual Property Award- 2019

- ❖ Dr. Benny Antony, Joint Managing Director and co-founder of the Kochi-based Arjuna Natural Ltd, has been honoured with the National Intellectual Property Award, 2019.
- ❖ He was awarded in the category of Top Individual for Patents and Commercialization.
- ❖ He is the inventor of BCM-95, the world's leading patented turmeric extract formulation.

- ❖ Also, he has over 80 international patents to his credit.
- ❖ Along with this Award, the Intellectual Property Office India and the World Intellectual Property Organisation (WIPO) have jointly honoured Antony with the 'WIPO Medal for Inventors'.



71st World Press Freedom Hero

- ❖ Dawn editor and Columnist Cyril Almeida from Pakistan has won the IPI's (International Press Institute) World Press Freedom Hero award in 2019.



- ❖ This award given for his "critical" and "tenacious coverage" of the civil-military relations in Pakistan.
- ❖ These awards will be presented in IPI's annual World Congress and General Assembly function to be held in Geneva, Switzerland on 5th June, World Intellectual Property Day 2019.

SPORTS

Azlan Shah Hockey Cup

- ❖ India was defeated by the South Korea in the penalty shootout of the final of Sultan Azlan Shah Cup 2019.
- ❖ 17th Ranked South Korea defeated World number 5 India to win the Sultan Azlan Shah Cup which was held at Ipoh, Malaysia.



Indian Open Badminton Tournament

- ❖ The 2019 edition of India Open ended at the Indira Gandhi (IG) Indoor Stadium, New Delhi.
- ❖ Denmark's Viktor Axelsen and Thailand's Ratchanok Intanon were crowned champions in men's and women's singles events respectively.
- ❖ Men's doubles were won by Thailand duo Lee Yang and Wang Chi-lin.
- ❖ Women's doubles were won by Indonesian duo Greysia Polii and Apriyani Rahayu.
- ❖ Ace Indian Badminton players PV Sindhu and Kidambi Srikanth both failed to make a mark.
- ❖ Indian Open tournament has been held since 2008.

National Cricket Academy

- ❖ Former Indian cricketer turned cricket administrator Rahul Dravid will now play a crucial role in shaping the future of the young cricketing talents in India.
- ❖ The batting legend will now have the responsibility of running the prestigious and all-important National Cricket Academy (NCA).

- ❖ The National Cricket Academy is located in Chinnaswamy Stadium, Bengaluru.
- ❖ The NCA was the brainchild of cricket administrator and former BCCI President Raj Singh Dungarpur in 2000.

Asian Airgun Championships

- ❖ India ended the 12th Asian Airgun Championships 2019 in Taiyuan, Taipei, with an overall tally of 25 medals including 16 gold, 5 silver and 4 bronze.
- ❖ Yash Vardhan and Shreya Agrawal struck gold in the men's and women's junior 10m air rifle event respectively.

Chess - Divya Deshmukh

- ❖ 13-years old Divya Deshmukh is now World no. 1 in the Under-14 girls' section.
- ❖ She becomes the second Indian after Koneru Humpy to hold the rank.

ICC Test Rankings

- ❖ India has retained the ICC Test Championship Mace and won the purse of \$ 1 million for a third continuous year after finishing at the top of ICC Test Team Rankings on the cut-off date of 1 April, 2019.



ICC Test Rankings

#	TEAM	M	PTS	RATE
1	India	41	4,983	122
2	South Africa	37	4,020	109
3	Australia	49	5,302	108
4	England	50	5,071	101
5	Pakistan	36	3,494	97
6	New Zealand	45	4,339	96
7	Sri Lanka	42	3,761	90
8	West Indies	30	2,077	69
9	Bangladesh	22	1,444	66
10	Zimbabwe	10	48	5

Azlan Shah Hockey Cup

- ❖ 17th Ranked South Korea defeated World number 5, India to win the 28th edition of Sultan Azlan Shah Hockey Cup which was held at Azlan Shah Stadium in Ipoh, Malaysia.
- ❖ India lost the match by 4-2 in the penalty shootout.
- ❖ It began in 1983 as a biennial contest.

- ❖ The tournament became an annual event after 1998, following its growth and popularity.
- ❖ The tournament is named after the ninth Yang di-Pertuan Agong (King) of Malaysia, Sultan Azlan Shah, an avid fan of field hockey.

Squash

- ❖ India's top-ranked squash player Saurav Ghosal stormed into the record books when he became the first Indian male to enter the top-10 list in the world.



- ❖ Two Tamilnadu women players, Joshna Chinappa and Dipika Pallikal were the first Indians to have reached the top-10 in the world rankings but failed to consolidate further.

FIFA

- ❖ FIFA – the International governing body of football - has released World Football rankings on April, 04 2019.
- ❖ India rose two points and gets 101st rank while Belgium tops the list.

Malaysian Open

- ❖ Chinese badminton ace Lin Dan clinched the Malaysia Open winning against countryman Chen Long.
- ❖ The women's singles saw Taiwanese top seed Tai Tzu Ying clinch her third consecutive Malaysia Open title after a triumph over Japan's Akane Yamaguchi.



Augusta Masters

- ❖ American Jennifer Kupcho became the first woman to capture a championship at Augusta Masters Golf Tournament winning against Mexico's Maria Fassi.
- ❖ Augusta Masters is one of the four major championships in professional golf.
- ❖ It was started in 1934 by Bobby Jones and it is always held at the same location, Augusta National Golf Club, Georgia, America.
- ❖ The historically Male-only tournament was opened to Woman golfers for the first time in 2019.

Hockey Coach

- ❖ Australia's Graham Reid has been appointed as the new coach of the India men's hockey team.
- ❖ He was a part of the silver medal winning team at the 1992 Barcelona Olympics as well as the Australian squad that won back-to-back Champions Trophy titles in 1984, 1985, 1989 and 1990

Boxing Gold Medal

- ❖ Manipur's Meena Kumari Maisnam claimed the gold medal in the 54 kg category at the Boxing World Cup at Cologne in Germany.



- ❖ She defeated Thailand's Machai Bunyanut in the Final.
- ❖ Earlier this year, she became only the second Indian woman boxer to win a gold medal at the prestigious Strandja Memorial Tournament in Sofia, Bulgaria.

Asian Cup Table Tennis Tournament 2019

- ❖ The Chinese players swept both the men's and women's singles titles at the Asian Cup table tennis tournament 2019.
- ❖ The 2019 Asian Cup competition took place in Yokohama, Japan.
- ❖ It was the 32nd edition of the event, and the fourth time that it had been held in Japan.

Event	Gold	Silver	Bronze
Men's Singles	Fan Zhendong	Ma Long	Koki Niwa
Women's Singles	Zhu Yuling	Chen Meng	Kasumi Ishikawa

Tiger Wins

- ❖ Tiger Woods has won the Augusta Masters National Golf tournament.
- ❖ Woods made history 22 years ago in 1997 when he won his first Masters Tournament at age 21.



- ❖ This victory at Augusta gives him 15 career major titles, just three behind all-time Golf great Jack Nicklaus.

Wrestling Rankings

- ❖ India's Bajrang Punia has regained the world number one spot in the men's 65-kilogram freestyle category rankings.

- ❖ The rankings were released by United World Wrestling.



- ❖ Punia won Gold in the Asian Games and Commonwealth Games as well as a silver in the World Championships in 2018.

Gomathi Marimuthu

- ❖ Trichy's Gomathi Marimuthu has won India's first gold medal of the Asian Athletics Championships 2019 held in Doha.
- ❖ She won the 800m finals with a personal best timing of 2:20.70s.
- ❖ It was the 30-year-old Tamil Nadu athlete's first major gold.



Santhosh Trophy

- ❖ The Services team has lifted the Santosh Trophy, beating Punjab 1-0 in the final at Ludhiana.
- ❖ The Santosh Trophy is a football knock-out competition contested by the regional state associations and government institutions.
- ❖ It is conducted by the All India Football Federation (AIFF), the governing body of football in India.
- ❖ Santhosh tournament started in 1941.

- ❖ It was named after the late Maharaja Sir Manmatha Nath Roy Chowdhary of Santosh (the place is now in Bangladesh).
- ❖ At that time, he was the President of the Indian Football Association and the donator of the trophy.
- ❖ The top three contestants in the tournament are awarded as

Position	Name of the Trophy	Donor
Winner	Santhosh Trophy	Maharaja of Santhosh
Runner-up	Kamla Gupta Trophy	Former head of Indian Football association head S.K.Gupta
Third Place	The Sampangi Cup	Karnataka State Football association

Jeremy Lalrinnunga

- ❖ Mizoram's 16-year-old Weight Lifter Jeremy Lalrinnunga has smashed the Youth World Record and Asian records in Asian Athletics 2019.
- ❖ The 16-year-old pulled off clean lifts in two of his three attempts (130kg, 134kg)
- ❖ Jeremy broke 15 records in total, combining national and international marks.



Asian Athletics Championship

- ❖ The 23rd edition of the Asian Athletics Championship concluded in Doha, Qatar.
- ❖ India with 17 medals (3 Gold, 7 silver and 7 bronze) finished fourth in the tournament.
- ❖ Gomathi Marimuth's gold-medal winning performance in the 800 metres event was widely acclaimed.
- ❖ Men's Event Medal Tally

Event	Gold	Silver	Bronze
Shot Put	Tejinder Pal		
1500 metres		Ajay Kumar Saroj	
3000 m steeple chase		Avinash Sable	
10,000 metres (Men)			Gavit Murli Kumar
400 metres hurdles			Jabir Madari Palliyalil

❖ Women's Event Medal Tally

Event	Gold	Silver	Bronze
800 metres	Gomathi		
1500 metres	PU Chithra		
Javelin Throw		Annu Rani	
Heptathlon		Swapna Barman	
10,000 metres			Sanjivani Jadhav
200 metres			Dutee Chand
400 metres			M.R. Poovamma
5000 metres			Parul Chowdary
400 metres hurdles			Sarita Gaykwad
4 x 100m Relay		M.R. Poovamma Saritaben V.K. Vismaya Prachi	

- ❖ Mohammad Anas, M. R. Poovamma, Vismaya Velluvakoroth and Arokia Rajiv won Silver in 4 x 100 metres Mixed relay race category.

La Liga Title

- ❖ Barcelona team has won the finals of the Spanish football league “La Liga”.
- ❖ They won playing against the team Levante.
- ❖ Star player of Barcelona, Lionel Messi scored the lone and winning goal of the match.
- ❖ Barcelona has won the La Liga title 26 times.
- ❖ La Liga is the men's top professional football division of the Spanish football league system.
- ❖ It was started in 1929.

La Liga	
Organising body	Liga de Fútbol Profesional (LFP)
Founded	1929; 90 years ago
Country	Spain
Confederation	UEFA
Number of teams	20
Level on pyramid	1
Relegation to	Segunda División
Domestic cup(s)	Copa del Rey Supercopa de España
International cup(s)	UEFA Champions League UEFA Europa League
Current champions	Barcelona (26th title) (2018–19)
Most championships	Real Madrid (33 titles)
Most appearances	Andoni Zubizarreta (622)
Top goalscorer	Lionel Messi (417)

ISSF World Cup 2019- Beijing

- ❖ The pair of Indian shooters Saurabh Chaudhary and Manu Bhaker clinched the 10m Air Pistol Mixed gold in the final at the International Shooting Sport Federation (ISSF) World Cup 2019 in Beijing, China.
- ❖ Anjum Moudgil and Divyansh Singh Panwar bagged a gold medal in the 10m Air Rifle Mixed Team event by defeating China in the same tournament.
- ❖ Prior to this, Chaudhary and Bhaker pair had already won a gold in the same category in the New Delhi edition of the shooting World Cup in February 2019.

MEDAL STANDINGS				
	Gold	Silver	Bronze	Total
1 IND	3	1		4
2 CHN	2	2	1	5
3 RUS	1	3	3	7
4 KOR	1	2	2	5
5 BUL	1			1

Asian Boxing Championship 2019

- ❖ The Asian Boxing Championship 2019 was held in Huamark Indoor Stadium in Bangkok, Thailand.
- ❖ This was the first-time women and men boxing championship held together.
- ❖ This event was organized by International Boxing Association.

- ❖ India finished with 13 medals that include 2 gold medals, 4 silver medals and 7 bronze medals.
- ❖ Amit Panghal from Haryana won the gold in 52-kg category and this was her first gold medal in the event.
- ❖ Pooja Rani defeated world champion Wang Lina from China in the 81-kg category and won the gold medal.
- ❖ This was also India's first ever gold medal in the 81-kg category from this elite Asian Boxing Championship tournament.

INDIA PACK A PUNCH AT ASIAN BOXING MEET

Indian pugilists win 2 gold, 4 silver and 7 bronze medals. It's the country's best showing ever at Asian Boxing Championships

GOLD	SILVER	BRONZE
Pooja Rani (81kg), Amit Panghal (52kg)	Simranjit Kaur (64kg), Kavinder Singh Bisht (56kg), Deepak Singh (49kg), Ashish Chaudhary (75kg)	Nikhath Zareen (51kg), Manisha Moun (54kg), Sonia Chahal (57kg), Sarita Devi (60kg), Shiva Thapa (60kg), Ashish (69kg), Satish Kumar (+91kg)

Asian Wrestling

- ❖ The 2019 Asian Wrestling Championships was held in Xi'an, China.
- ❖ India stood at 8th rank in medal table.
- ❖ India won 16 medals in total.
- ❖ Medal split up: 1 gold, 6 silver and 9 bronze.
- ❖ Bajrang Punia won the lone gold medal in 65kg category.
- ❖ The tournament is organised by the Asian Associated Wrestling Committee (AAWC).
- ❖ The first tournament was held in Jalandhar in 1979.
- ❖ The women's tournament was first staged in 1996.

IMPORTANT DAYS

Odisha Day – April 01

- ❖ Utkal Divas, or Odisha Day is celebrated on April 01 every year.
- ❖ This day is celebrated to mark the formation of Odhisa province (Orissa state now) during British rule.
- ❖ The Odisha province was formed on basis on linguistic pattern of people in the area on April 1, 1936.

- ❖ It was the first linguistic province in India before the Indian Independence.
- ❖ It was previously divided into provinces of Bengal and Bihar.



World Autism Awareness Day – April 2

- ❖ April 2nd is internationally recognized as World Autism Awareness Day.
- ❖ It was designated by the United Nations General Assembly resolution which was adopted in December 2007.
- ❖ World Autism Day is one of only seven official health-specific UN Days.
- ❖ This day is observed to raise awareness about people with Autism Spectrum Disorder (ASD) throughout the world.

International Mine Awareness Day

- ❖ International Mine Awareness Day and Assistance in Mine Action 2019 was observed on April 4, 2019.



- ❖ In 2005, the UN General Assembly declared that 4th April of each year shall be observed as the International Day for Mine Awareness.
- ❖ The theme of this year was 'United Nations Promotes SDGs – Safe Ground – Safe Home'.

- ❖ The theme links mine action, converting mine fields into safe sporting grounds and the Sustainable Development Goals (SDGs).

National Maritime Day

- ❖ National Maritime Day is celebrated on April 5 of every year.
- ❖ The day aims to spread awareness in supporting safe and environmentally sound commerce between the continents across the world.
- ❖ The theme of 2019 celebrations are "Indian Ocean-An Ocean of opportunity".
- ❖ The day was first celebrated on April 5, 1964.
- ❖ Indian shipping was first started on April 5, 1919 when SS Loyalty, the first ship of The Scindia Steam Navigation Company travelled from Mumbai to London.
- ❖ In Tamilnadu, VO Chidambaram registered his Swadeshi Shipping Company in October 1906. SS Galia was its first ship.

World Health Day

- ❖ Every year, the World Health Day is celebrated on April 7 as a global health awareness day under the sponsorship of the World Health Organization.
- ❖ WHO was created in April 7, 1948.
- ❖ This year (2019) marks the end of the World Health Organization's 70th-anniversary celebrations.
- ❖ The theme of this year's World Health Day 2019 is "Health for All".
- ❖ India's work towards health coverage for all includes introduction of Ayushman Bharat scheme.
- ❖ This scheme has been introduced to provide a family cover of Rs. 5 lacs to socio-economically weaker sections of the society.
- ❖ All the UN Member States have agreed to try to achieve Universal Health Coverage (UHC) by 2030, as a part of the Sustainable Development Goals.

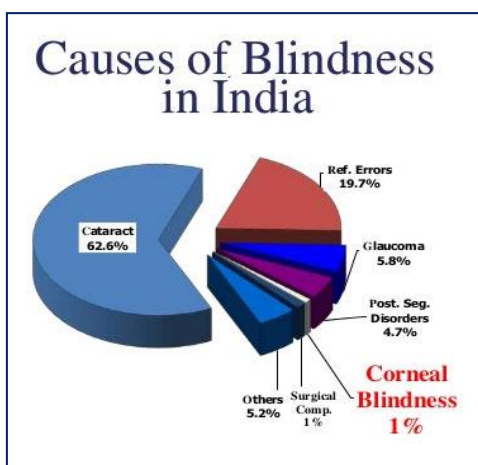
Battle of Kohima

- ❖ India observed the 75th Anniversary of Battle of Kohima on April 4.
- ❖ Battle of Kohima is considered as the turning point of the U-Go offensive or Operation C mission, conducted by the Japanese in India in 1944 during the Second World War.
- ❖ The battle was fought in three stages from 4 April to 22 June 1944 around the town of Kohima in Nagaland.
- ❖ British India successfully drove the Japanese at the end of the battle.

- ❖ The battle is often referred to as the "Stalingrad of the East".
- ❖ In 2013, the British National Army Museum voted the Battle of Imphal and Kohima to be "Britain's Greatest Battle".

Prevention of Blindness Week 2019 - April 01 to 07

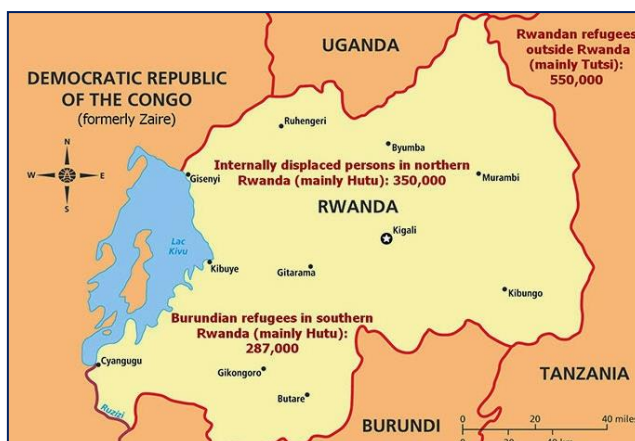
- ❖ Prevention of Blindness Week 2019 was observed from 1st of April (Monday) to 7th of April (Sunday).
- ❖ This campaign is planned by the Government of India for increasing the awareness towards the blind people.



- ❖ Prevention of Blindness Week was first started by the Jawaharlal Nehru and Raj Kumari Amrit Kaur in the year 1960 under the Societies Registration Act of 1860.
- ❖ Another campaign "Vision 2020: The Right to Sight" was launched in 1999 by the WHO for the prevention of the blindness.

International Day of Reflection on the 1994 Rwanda Genocide- April 07

- ❖ International Day of Reflection on the 1994 Rwanda Genocide observed annually on April 7 by the UN.
- ❖ In April 7, 2004 it was recognized by the United Nations as an International Day to remember 1994 Rwandan genocide.
- ❖ 2019 marks the 25th anniversary of the genocide against the Tutsi in Rwanda, one of the darkest chapters in human history.



- ❖ More than 800,000 people of Tutsi, moderate Hutu, Twa and others who opposed the genocide were systematically killed in less than three months.

National Handloom Week April - 7 to 14

- ❖ The National Handloom week has been observed from 7th April to 14th April this year.



- ❖ The National Handloom Day is observed on 7th August every year and last year in December 2018 the National Handloom Week was observed.
- ❖ On this occasion, a book named 'The Indian textile Sourcebook' authored by Avalon Fotheringham will be launched on 9th April.

International Day of Sport for Development and Peace

- ❖ Every year April 6 is observed as International day of Sport for development and peace.
- ❖ The day is observed since April 6, 2014 based on a resolution passed by General Assembly of the United Nations.
- ❖ This date commemorates the inauguration, in 1896, of the first Olympic games of the modern era, in Athens (Greece).

- ❖ IDSDP is an annual celebration of the power of sport to drive social change, community development and to foster global peace and understanding.



World Homoeopathy Day

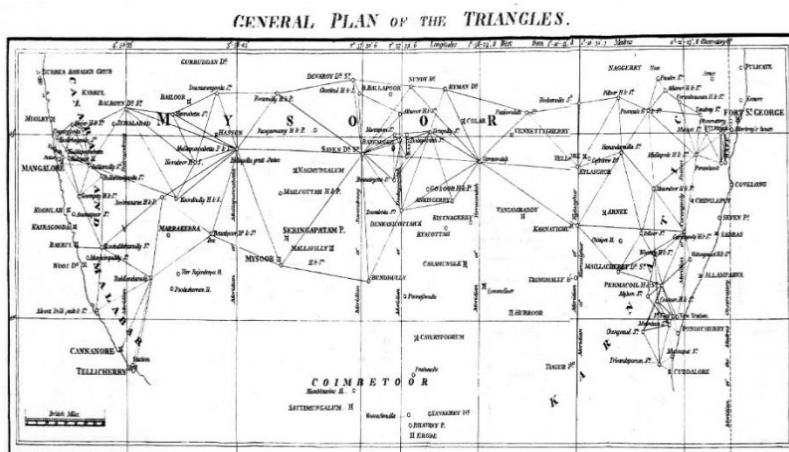
- ❖ The World Homoeopathy Day is observed on 10th April.
- ❖ It commemorates the birth anniversary of the founder of Homoeopathy, Dr Samuel Hahnemann of Germany.



- ❖ It aims to create awareness about the alternative system of medicine and to improve accessibility and success rates.
- ❖ AYUSH Ministry had convened a 2-day International Convention on Homeopathy in New Delhi.

National Survey Day

- ❖ 10th April is celebrated as 'Survey Day' throughout India.
- ❖ This day has a special significance in the History of Surveying as it is on this day (April 10, 1802) that Major William Lambton started two important works.
 - The GTS (Great Trigonometrical Survey)
 - Measurement of Great Arc from the Cape Comorin to Bangalore.
- ❖ The Great Trigonometrical Survey was a project which aimed to measure the entire Indian subcontinent with scientific precision.

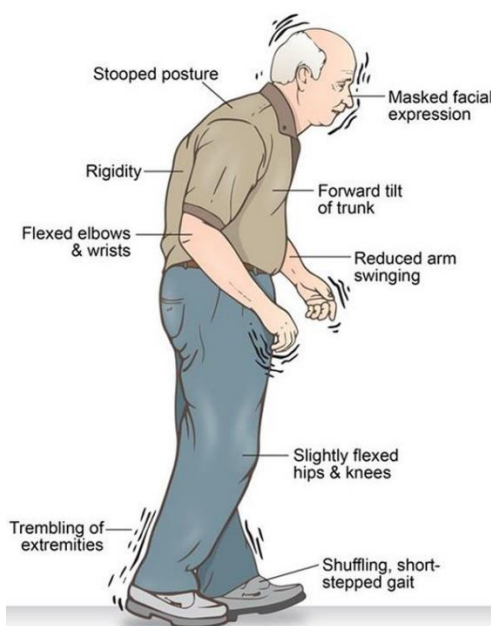


- ❖ The baseline for the Survey was Madras.

World Parkinson's Day - April 11

- ❖ World Parkinson's Day is observed on April 11th of every year.
- ❖ The day aims to raise awareness of Parkinson's disease, promote a greater understanding of this condition and how it can affect a person.

Typical appearance of Parkinson's disease



- ❖ The theme of 2019 is “Awareness is #KeyToPD”
- ❖ This day marks the birthday of Dr James Parkinson, London who explained the Parkinson’s Disease in “An Essay on the Shaking Palsy” in 1817.
- ❖ He systematically described the six individuals with the symptoms of Parkinson Disease.
- ❖ Jean-Martin Charcot, a French neurologist, named the term “Parkinson’s Disease.”

National Safe Motherhood Day – April 11

- ❖ National Safe Motherhood Day (NSMD) is observed annually on 11 April.
- ❖ The theme of 2019 NSMD is "Midwives for Mothers"
- ❖ In 2003 the Government of India had declared 11th April as National Safe Motherhood Day which is the anniversary day of Kasturba Gandhi's birth.
- ❖ The day aims to raise awareness about the proper healthcare of women, maternity facilities to pregnant and lactating women, reducing anemia among women, institutional delivery, for better pre and post-natal health care.

International Day of Human Space Flight- April 12

- ❖ Every year April 12th celebrated as an International Day of Human Space Flight to commemorate the first ever flight of human in space.
- ❖ On April 12, 1961 a citizen of the Soviet Union, first lieutenant Yuri Gagarin orbited the Earth onboard "Vostok" spacecraft for the first time in mankind history.



- ❖ Since 2001, Yuri's Night, also known as the "World's Space party" is held every April 12 worldwide to commemorate milestones in space exploration.
- ❖ On 7 April 2011, the United Nations General Assembly adopted a resolution declaring April 12 as the International Day of Human Space Flight.

Jallianwala Bagh Massacre Day - April 13

- ❖ Jallianwala Bagh Massacre Day observed every year April 13 to Commemorate Amritsar Massacre which was took place on 1919 at Jallianwala Bagh, Punjab.
- ❖ It is named after the famous Jallianwala Bagh, which is a public garden stretched over an area of 7 acres, with walls covering all of its sides.

- ❖ People had assembled for a peaceful to condemn the arrest and deportation of two national leaders, Satya Pal and Saifuddin Kitchlew.
- ❖ The troops of the British Indian Army under the command of Colonel Reginald Dyer fired rifles into a crowd of Indians.



- ❖ While the official enquiry by the British informed about 379 deaths, the death toll was quoted to be around 1,000 by Congress.
- ❖ This year marks the 100th year of the black episode in the Indian freedom struggle.
- ❖ Also, the Vice President of India released a postage stamp and a coin commemorating the 100th anniversary of the Jallianwala Bagh massacre.

Ambedkar Jayanthi

- ❖ Ambedkar Jayanthi is celebrated every year on April 14th.
- ❖ This event coincides with the birth day of Dr. Ambedkar. April 14, 2019 was his 128th birth anniversary.



- ❖ Dr. Bhimrao Ambedkar was the chairman of the Drafting committee of the Indian Constitution.

- ❖ His extraordinary brilliance and immense contribution to the Indian society is revered through the length and breadth of India.

Himachal Pradesh Day

- ❖ The Himalayan-state Himachal Pradesh celebrated 72nd Himachal Day on 15th April.
- ❖ Himachal Day is celebrated to commemorate its creation on April 15, 1948.

Mahavir Jayanthi

- ❖ Mahavir Jayanti is the birth anniversary of 24th and last Jain Tirthankar Lord Mahavira.
- ❖ As per the Gregorian calendar, the day occurs either in March or April. This year it was celebrated by Jains on 17 April 2019.
- ❖ It is one of the most important religious festivals for Jains.
- ❖ Mahavira taught that observance of the five vows of ahimsa (non-violence), Satya (truth), asteya (non-stealing), brahmacharya (chastity), and aparigraha (non-attachment) is necessary for spiritual liberation.
- ❖ His teachings were compiled by Indrabhuti Gautama (his chief disciple).

Mujibnagar Day

- ❖ Bangladesh observed Mujibnagar Day on 17th April.
- ❖ Shiek Mujibur Rahman, the founder of Awami League in Bangladesh was arrested and deported to Pakistan on March 25, 1971.
- ❖ Then the Leaders of the Awami League party gathered in Baidyanathtala on April 17, 1971, and decided to establish the Provincial Government of Bangladesh.
- ❖ This event later paved the way for the formation of Bangladesh as an independent country.
- ❖ This former mango orchard called Baidyanathtala was renamed as Mujibnagar in 1998 to commemorate the historic event.

World Heritage Day 2019

- ❖ April 18 was observed as the World Heritage Day. The theme for this year is 'Rural Landscapes'.
- ❖ The theme Rural Landscapes is related to the theme of the 'Scientific Symposium on Rural heritage'.

- ❖ The World Heritage Day was proposed by the International Council on Monuments and Sites (ICOMOS) in 1982 and approved by the General Assembly of UNESCO in 1983.
- ❖ This day offers an opportunity to raise the public's awareness about the diversity of cultural heritage and the efforts that are required to protect and conserve it.
- ❖ ICOMOS is a partner and founding member of the "Blue Shield" which works to protect the world's cultural heritage threatened by wars and natural disasters.
- ❖ ICOMOS was founded in 1965 and headquartered at Paris.

World Haemophilia Day – April 17

- ❖ Haemophilia is a rare genetic bleeding disorder in which the blood does not clot properly. As a result, the inherent of Haemophilia suffers from spontaneous and bleed for a longer time after sustaining an injury.
- ❖ Every April 17 World Haemophilia Day is recognised worldwide to increase awareness of haemophilia and other inherited bleeding disorders.
- ❖ World Haemophilia Day was started in 1989 by the World Federation of Hemophilia (WFH).

Quick Facts

- ❖ Every injury is not always life-threatening. Hemophilia patients bleed because a protein, called 'Clotting Factor', is either absent or doesn't work properly in their blood.
- ❖ While most people assume hemophilia only affects men, occasionally women - who are 'silent carriers' - can suffer bleeding symptoms as well.

Good Friday

- ❖ The Christian community observed Good Friday on April 19 to commemorate the crucifixion and death of Jesus Christ on Calvary.
- ❖ It is also referred to as Black Friday, Great Friday, Easter Friday or Holy Friday.
- ❖ Good Friday coincides with the beginning of the Jewish festival of Passover.
- ❖ Good Friday is followed by Easter Sunday, the day on which Jesus was resurrected from death.

World Chinese Language Day

- ❖ The United Nations (UN) observes the UN Chinese Language Day every year on or around April 20.

- ❖ The event was established by the UNESCO in 2010.
- ❖ The objective of the day is to celebrate multilingualism and cultural diversity.
- ❖ This day also strives to promote equal use of all six UN official working languages (English, Russian, Spanish, Arabic, French, and Chinese) throughout the organization.

National Civil Service Day

- ❖ National Civil Services Day is observed on April 21 across India.
- ❖ The first civil service day was observed in 2006.
- ❖ On this day civil servants rededicate themselves to cause of the citizens and renew their commitment to public service.



- ❖ This day coincides with the date on which Sardar Vallabh Bhai Patel had addressed the first batch of civil service probationers at Metcalfe House, New Delhi in 1947.
- ❖ In this famous speech, Sardar Patel had referred to bureaucrats as “steel frame of India”.
- ❖ The Civil Services Day 2019 was NOT observed on this year due to Lok Sabha elections.

World Earth Day- April 22

- ❖ World Earth Day is celebrated every year on April 22 Worldwide.
- ❖ The first Earth Day, on April 22, 1970, was marked by 22 million Americans who marched to protest against damage done to the environment.

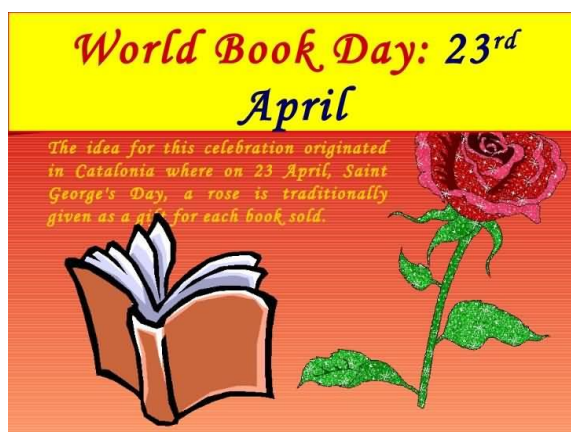
- ❖ This day is celebrated to remind us about the need to protect and safeguard our environment so that we can make this planet a better place for our future generations.



- ❖ The theme for Earth Day 2019 is 'Protect Our Species'. It aims to draw attention to the rapid extinction of species across the world.

World Book Day

- ❖ World Book Day, also known as World Book and Copyright Day or International Day of the Book is observed on April 23.
- ❖ The event is organized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) to promote reading, publishing, and copyright.



- ❖ The day was first observed on April 23, 1995.
- ❖ It is the date on which several prominent authors, William Shakespeare, Miguel Cervantes and Inca Garcilaso de la Vega all died.
- ❖ The 2019 Book day plans to celebrate literature and reading with special focus on “protecting Indigenous languages”.

Women's Political Empowerment Day – April 24

- ❖ April 24 is celebrated as Women's Political Empowerment Day every year in India.
- ❖ The idea is to bring to focus on the need for female representation in politics.



- ❖ The 73rd Constitutional Amendment, which became Part IX of the Constitution on 24 April 1993, provides for not less than one-third seats reserved for women in local bodies.
- ❖ The Institute of Social Sciences, New Delhi has been celebrating April 24 as Women's Political Empowerment Day since 1994.
- ❖ The 25th Women's Political Empowerment Day Celebrations (2019) is on the theme: "Panchayats in Disaster Management".

International Day of Multilateralism and Diplomacy for Peace – April 24

- ❖ On April 24 2019, the First official International Day of Multilateralism and Diplomacy for Peace was celebrated.
- ❖ It was officially approved on 12 December, 2018 by United Nations General Assembly through a resolution.
- ❖ The day aims to promote the advantages of multilateralism and diplomacy for peace through educational and public awareness-raising activities.

World Malaria Day – April 25

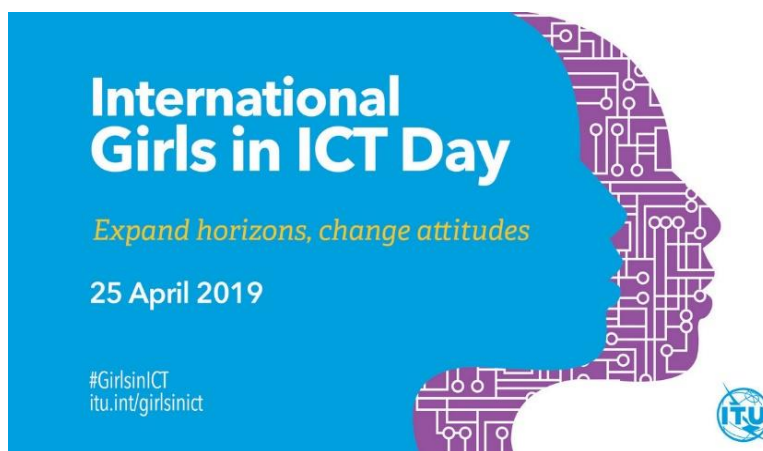
- ❖ World Malaria Day is an international observance commemorated every year on 25 April
- ❖ The day recognizes global efforts to control malaria.
- ❖ World Malaria Day (WMD) was established in May 2007 by the 60th session of the World Health Assembly - World Health Organisation's decision-making body.



- ❖ Prior to the establishment of WMD, Africa Malaria Day was held on April 25.
- ❖ The theme of 2019 WMD is “Zero malaria starts with me”.

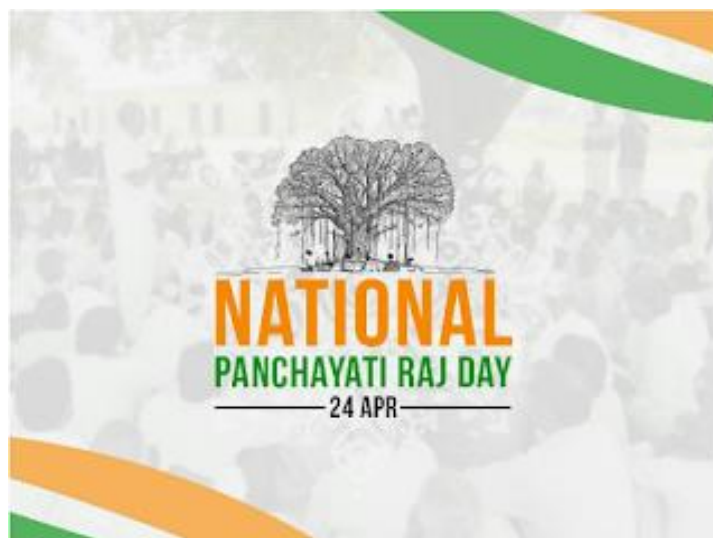
International Girls in ICT Day – April 25

- ❖ International Girls in ICT Day is celebrated every year on the fourth Thursday of April.
- ❖ ICT - Information and Communications Technology
- ❖ This year it is celebrated on April 25.
- ❖ It aims to encourage and empower girls and young women to consider studies and careers in the growing field of ICTs.
- ❖ The day has been observed since 2012 by the member of International Telecommunication Union (ITU).



National Panchayati Raj Day

- ❖ National Panchayati Raj Day is celebrated every year on 24th April by the Ministry of Panchayati Raj.
- ❖ Former Prime Minister Manmohan Singh declared the first celebration of the day on 24th April 2010.



- ❖ This day marks the passing of Constitution (73rd Amendment) Act, 1992 that came into force with effect from 24 April 1993.
- ❖ The amendment recognizes panchayats as 'Institutions of self-government'.
- ❖ It provides panchayaths with necessary powers and authority to help them to function as units of self-government.

World Creativity and Innovation Day

- ❖ The World Creativity and Innovation Day (WCID) is celebrated every year on 21st April.
- ❖ It is observed to encourage people to use creativity in problem-solving for all issues related to achieving Sustainable Development Goals.



- ❖ April 21, 2018 is the first ever WCID day observed by UN.

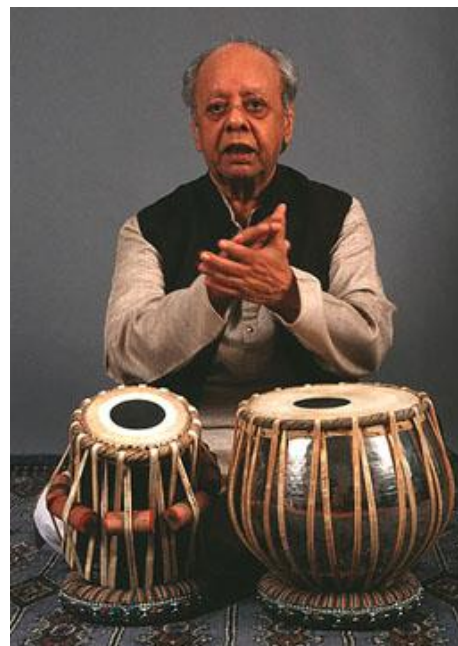
World Intellectual Property Day

- ❖ World Intellectual Property Day is observed annually on 26 April.
- ❖ The event was established by the World Intellectual Property Organization (WIPO) in 2000.
- ❖ The Convention Establishing the World Intellectual Property Organization entered into force in April 26, 1970.

- ❖ This day aims to spread awareness about the role that IP rights (patents, trademarks, industrial designs and copyright) play in encouraging innovation and creativity.
- ❖ The theme of this year is “Reach for Gold”.

Ustad Allah Rakha

- ❖ The birth centenary of tabla maestro Ustad Allah Rakha (29 April 1919 – 3 February 2000) was celebrated on April 29.
- ❖ He popularised the art of tabla and played it across the globe.
- ❖ Along with sitar player Pandit Ravi Shankar, Allah Rakha popularized the Indian classical percussion in the West.
- ❖ He was the greatest proponent of the Punjab Gharana of tabla music.
- ❖ Punjab gharana was founded by Lala Bhawani Das, one of Emperor Akbar’s court musicians.
- ❖ India’s most famous tabla player Zakir Hussain is the son of Allah Rakha.



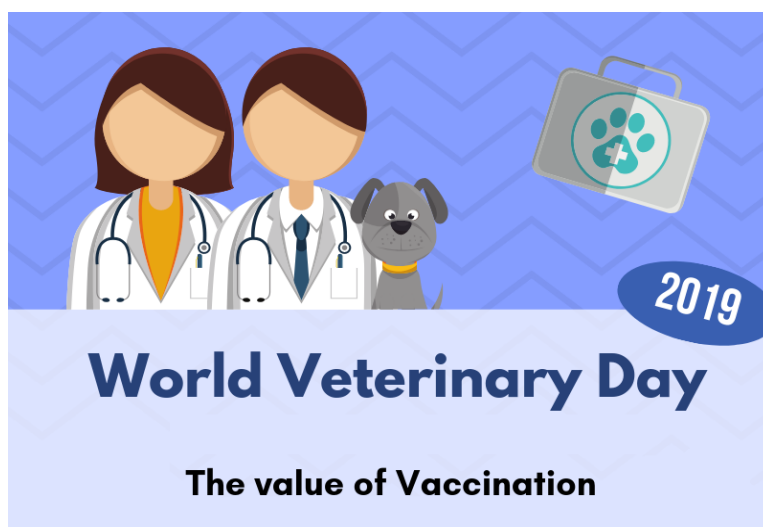
World Immunisation Week

- ❖ World Immunisation Week is celebrated every year during last week of April.
- ❖ The theme of this year is ‘Protected Together: Vaccines Work!’
- ❖ This year’s theme targets to demonstrate the value of vaccines for the health of children, communities and the world.
- ❖ Immunization can protect against 25 different infectious agents or diseases, from infancy to old age.
- ❖ The World Health Organisation endorsed the observance of World Immunization Week during its May 2012 meeting.



World Veterinary Day - April 27

- ❖ World Veterinary Day observed every year April 27 globally.
- ❖ It highlights and promotes the lifesaving work performed by veterinarians around the globe.
- ❖ World Veterinarian Day was created in 2000 by the World Veterinary Association.
- ❖ The theme of World Veterinary Day 2019 is the Value of Vaccination.



World Day for Safety and Health at Work - April 28

- ❖ April 23, every year is celebrated as World Day for Safety and Health at Work.
- ❖ It aims to raise awareness about the wellness and preventions of accidents at the workplace that can impact the lives of workers.
- ❖ It was declared by the International Labour Organisation (ILO) to promote the prevention of occupational accidents and diseases globally.
- ❖ The theme for this year is "safety and health at the heart of the future of work."
- ❖ It has been observed by the International Labour Organization (ILO) since 2003.

Ayushman Bharat Diwas

- ❖ Ayushman Bharat Diwas is celebrated across the country on April 30.
- ❖ This programme seeks to provide easily available and affordable medical facilities in the remote parts of the country.
- ❖ The Scheme aims to provide benefits cover of 5 lakh rupees per family per year.

Universal Day of Culture

- ❖ Many countries around the world annually observe World Culture Day on April 15.
- ❖ This day was established to commemorate the adoption of the “Roerich Pact” in 1935.
- ❖ It is an inter-American treaty on the protection of artistic and scientific institutions and historic monuments.
- ❖ The day is named after the Russian artist and painter Nicholas Roerich.
- ❖ The organization World League of Culture initiated the first celebration of this day in 1998.

International Chernobyl Disaster Remembrance Day

- ❖ The International Chernobyl Disaster Remembrance Day was observed across the world on 26 April.
- ❖ The United Nations General Assembly adopted a resolution in December 2016 to observe April 26 as the International Chernobyl Disaster Remembrance Day.
- ❖ The day commemorates the explosion at the Ukraine's Chernobyl Nuclear Power Plant in 1986.
- ❖ Nearly 8.4 million people in the three countries were exposed to the radiation.

International Dance Day

- ❖ International dance day is celebrated on April 29 of every year.
- ❖ The day seeks to promote the art of dance around the world.
- ❖ It marks the anniversary of Jean-Georges Noverre (1727–1810).
- ❖ He was the creator of modern ballet.
- ❖ The day was the brainchild of the Dance Committee of the International Theatre Institute (ITI).
- ❖ ITI is the main partner for performing arts of UNESCO.
- ❖ The first celebration was held in 1982.
- ❖ Every year a message from an outstanding choreographer or dancer is circulated throughout the world on dance day.
- ❖ The person is designated as Message Author of the year.
- ❖ Indian dancer Chetna Jalan is the lone Indian message author.
- ❖ She sent the global dance day message in 1986.

MISCELLANEOUS

Silamboli Su. Chellappan

- ❖ Tamil Scholar and orator Silamboli Su. Chellappan passed away at the age of 91 in Thiruvanmiyur, Chennai.



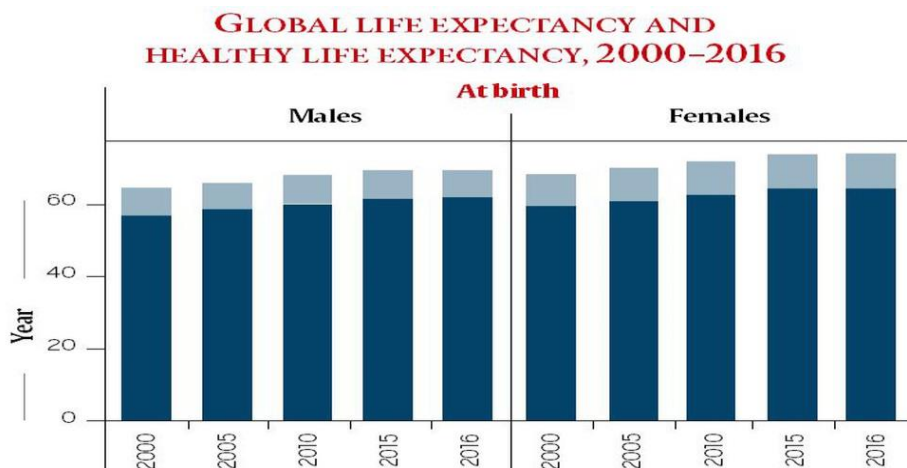
- ❖ He held posts such as director of Tamil Development and founder-director of World Tamil Research Centre.
- ❖ He has written Silamboli, Silapathikara Sinthanaigal, Sanga Ilakiya Thaen and other books.
- ❖ The State Government and Tamil fora awarded him in recognition of his contribution to Tamil literature and language.
- ❖ Veteran Tamil scholar R.P.Sethupillai gave him prefix Silamboli which would go on to stay with him.

Tobacco Abuse

- ❖ According to World Health Organisation (WHO), Global cigarette sales in 2017 stood at \$700 billion, which was 250 times more than what the WHO needed to protect human health.
- ❖ Tobacco is the only legal drug that kills many of its users.
- ❖ According to Tobacco Institute of India, India accounts for 84% of the world's consumption of smokeless tobacco.

World Health Statistics 2019

- ❖ The World Health Statistics 2019 has been published by World Health Organization to coincide with World Health Day on 7 April.
- ❖ For the first time the Global Health Statistics have been disaggregated by sex.
- ❖ Women outlive men everywhere in the world – particularly in wealthy countries.



- ❖ The reasons are biological, environmental and societal factors, and some impacted by availability and uptake of health services.
- ❖ Between 2000 and 2016, global life-expectancy at birth increased by 5.5 years, from 66.5 to 72.0 years.

Cesarean Awareness Month

- ❖ The month of April is observed as Cesarean Awareness Month by International Cesarean Awareness Network.
- ❖ Awareness campaigns are conducted to reduce the number of cesareans in mothers who do not really need or who will not benefit from this procedure when compared to a vaginal birth.

My Circle App

- ❖ My Circle App was launched by Bharti Airtel in collaboration with FICCI Ladies Organisation (FLO) to aid in the safety of women.
- ❖ During emergency situations, this app enables women to send SOS alerts with location tracking facility to any of their family or friends in 13 languages including English and Tamil
- ❖ This app would work on phones with any telecom service network, both Airtel and non-Airtel.

100 Most Influential People

- ❖ The TIME 100 Most Influential People 2019 list has been released, naming the world's most influential pioneers, leaders, titans, artists, and icons of the year.
- ❖ Reliance Industries Chairman Mukesh Ambani figures prominently in the list.
- ❖ The names of Supreme Court lawyers Menaka Guruswamy and Arundhati Katju are included in the list.
- ❖ They argued and won the “Navtej Johar case” in which the Supreme Court had decriminalized homosexuality by striking down Section 377 of the Indian Penal Code.



- ❖ The first such list was published in 1999.
- ❖ Time's recognizes twenty persons in each of five broad categories:

- Leaders and Revolutionaries
- Scientists and Thinkers
- Builders and Titans
- Artists and Entertainers
- Heroes and Icons

Rajouri Day – April 13

- ❖ Rajouri Day is celebrated on April 13 every year to commemorate the bravery and valour of the soldiers who laid down their lives for the liberation of Rajouri district.
- ❖ After the accession of Jammu and Kashmir, Pakistan invades along with the rebels and deserters from the western districts of the state, captured Rajouri on 7 November 1947.
- ❖ Rajouri was recaptured on 12 April 1948 from rebels and Pakistan Army personnel who had infiltrated from across the border.



World Allergy Week 2019

- ❖ World Allergy Week is an annual global initiative of the World Allergy Organisation (WAO) from 2011.
- ❖ It was observed worldwide between 7th to 13th of April, 2019.
- ❖ The theme for this year is “The Global Problem of Food Allergy”.
- ❖ WAO first hosted “World Allergy Day” in July 2005 in association with the biennial World Allergy Congress. It is celebrated annually on 8 July.
