

## Current Affairs

- ISRO to build three sets of rockets, crew modules for Gaganyaan.

ISRO, which got shot in its arm with the approval of Rs.10,000 crore budget for the human space mission, has a long way before executing the mission.

- Nations fastest train to link Delhi and Varanasi flagged off by PM Modi. It is India's first Engineless train. Train 18 manufactured by ICF Chennai at a cost of Rs100 crore recently became India's fastest train by hitting speeds of over 180kmph.
- Light pollution harms not just humans, but also entire ecosystem. Artificial light is a pollutant, changing the natural course of life for people, animals and plants. Night time light is having profound impacts that extend to the entire ecosystem.
- Sustainable plastics developed from sea-weed eating microbes. Scientists have developed biodegradable plastics derived from micro organisms that feed on seaweed which produce zero toxic waste and can be recycled into organic waste.
- A Tsunami killed at least 420 people and injured hundreds on the Indonesian islands of Java and Sumatra following an underwater landslide caused by a volcano.
- India to be one of world's top two scientific nations by 2030. India already has number 1 spot in the tsunami early warning. We are number 4 in weather forecast and number 3 in nano- technical.
- PM Modi inaugurates India's longest rail road bridges in Assam's Bogibeel. It is over the Brahmaputra river near Dibrugarh in Assam. It is 49.4 km long double decker rail-cum-road bridge.
- 'Sadaiy Atal' a memorial of former PM Sh Atal Bihari Vajpayee was dedicated to the nation on his 94th birth anniversary. President Ram Nath Kovind, Vice President M.Venkaiiah Naidu and PM Modi paid their tributes to the great soul of India. This memorial has been built near the Rashtriya Smirti Sthal, where his mortal remains were consigned to flames.
- Small changes in oxygen levels have big implications for ocean life. Findings reveal that marine organisms are sensitive to very small changes in oxygen, and decrease in abundance. This is called 'Zooplankton'

Zooplankton are important components of the food web in the expanse of deep, open ocean called the midwater.

- Uranus is a lopsided oddity, the only planet to spin on its side. Scientists now think that they know how it got that way: It was pushed over by a rock at least twice as big as Earth.
- World's smallest 'Tic-Tac-Toe' game board was made with DNA structures: Scientists have created world's smallest Tic-Tac-Toe game board using DNA origami tiles that can be programmed to transform into predesigned patterns.
- Three Indian origin students among Time's 25 most influential teens of 2018. They have marked across numerous fields and have become inspiration for youngsters across the world for their spectacular achievements.
- Scientists have developed a 3D printed robot hand which can play simple musical phrases on the piano by first moving its wrist. It was developed by researchers at the Cambridge University in the U.K.
- Termites can help draw clean energy from coal – a big polluting chunk of the global energy supply – into cleaner energy for the world. It may sound crazy at first – termites – gut microbes eating coal – but

coal is basically wood that has been cooked for 200 years.

- At 90, ever young reporter Tintin set to feature in a new film and book. Casterman, which publishes his comic book adventures will be producing this new film – who made Tintin's first Hollywood outing in 2011.
- Algorithm developed to predict Tennis players next shots. Scientists say they have created an algorithm that can predict where a tennis player will hit the next ball by analysis data.
- Rashtriya Kaamdhenu Aayog has been setup for the welfare of cows.
- Mahendra Singh Dhoni was declared the Man of the series in India Australia One day series 2019.
- Tamil Nadu bagged the 'Swasth Bharat Yatra Award'.
- Kr. Dharamsena was awarded the umpire of the year 2018.
- 30th January is celebrated as Martyr's Day to honour the brave martyrs of India who have sacrificed their lives for the country.

### **REPUBLIC DAY CURRENT AFFAIRS**

- Prior to its commencement, the PM lays a floral wreath at the Amar Jawan Jyoti, a memorial to the martyrs at the India gate.
  - Chief guest South African President- Cyril Ramaphosa.
  - The President Sh Ram Nath kovind raised the National flag as the National Anthem was played and 21 guns salute was given.
  - The parade was led by the three division of the armed forces (Army, Navy and Air Force)
  - Women power was again featured in this year parade.
1. Captain Shikha Surbhi became the first woman officer to have joined the Army's 'Daredevils' Motorcycle Display stunt team
  2. Lt. Bhavana Kasturi led an army contingent of 144 male soldiers in this year's Republic day parade
  3. In addition the all women contingent of Assam rifles participated in the parade for the 1st time.
- Powerful, new artillery weapons were displayed at the parade for the first time. These are 1) M-777 American Ultra Light Howlizer and 2) K-9 Vajra -T .These were introduced to the Indian army in November 2018. These will deployed at high altitude border with China and Pakistan.
  - The I.A.F presented the new experimental use of bio-fuel to fly military aircraft only a few countries in the world have this capacity. This bio-fuel has been extracted from Jatropha plant seeds sourced with Chhattisgarh Bio-diesel development authority. It was processed using technology patented by CSIR (Council of Scientific Research Institute) and the Indian Institute of Petroleum.
  - Various Indian states represented their culture such as historical events, festivals architectural heritage, important social and economic projects, environment and visions for the future, through their tableaux.
  - This year the Delhi government's tableaux showcased the time spent by Mahatma Gandhi and Gandhi Smriti before his assassination there in 1948. Year 2018-19 has been celebrated as the 150th

birth anniversary of Gandhiji.

- Beating the Retreat ceremony is held on 29th January every year. It symbolizes retreat after a day on the battlefield and features performance by bands of the three wings of the Indian Army - The Army Navy and Airforce.
- Important awards like , the Ashok chakra and Kirti chakra ere given away by the president.
- Children, who got 'National Bravery Awards' role past the spectators on colourfully decorated elephants.
- In all there were 25 marching and mounted contingents, various military vehicles, 20 military bands, 30 cultural Tableaux and aircraft's in addition to cultural performance of 1200 school children.
- India Republic Day Parade is one of the most spectacular parades in the world.