

Science and Technology

Google announces 'Journalism AI' project

• To help news industry use Artificial Intelligence (AI) in more innovative ways, Google has announced a partnership with Polis, the international journalism think-tank at London School of Economics and Political Science, to create "Journalism AI".

Cyclone Phethai

• Cyclone Phethai to hit Andhra Pradesh coastal belt and is likely to cross between MachiliPatnam and Kakinada in the coming 24 hours.

UN Climate conference finalises rules to implement Paris climate treaty

 Ministers of 200 nations finally reached consensus on rules to implement the 2015 Paris climate agreement. The Paris accord aims to limit rise in global atmospheric temperature to well below 2 degrees Celsius from pre-industrial revolution levels.

Inventions / Discover

Step closer to detecting krait venom

- Researchers have found a DNA aptamer (a small, single-stranded DNA molecule that binds to a
 specific target molecule) originally developed against alpha toxin of Bungarus multicinctus krait
 snake can be used for reliable detection of another krait snake species Bungarus caeruleus.
- multicinctus snake is found in China and Taiwan while B. caeruleus snake is found in the Indian subcontinent. Of five krait species found in India, B. caeruleus is the most common one. There are about 50,000 deaths a year in India due to snakebites.

Space Science

Three astronauts set to launch to ISS

Three space travellers, including two astronauts on their first flight, are scheduled to launch to the International Space Station (ISS) for a six-and-a-half month mission.



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• The three new space travellers – Anne McClain of NASA, David Saint-Jacques of the Canadian Space Agency and Oleg Kononenko of Russian space agency Roscosmos are preparing to launch aboard the Soyuz MS-11 spacecraft in Kazakhstan.

'Sun in a box' system to store renewable energy

- Massachusetts Institute of Technology (MIT) scientists in the U.S. have designed a system that could store renewable energy, such as solar and wind power, and deliver it back into an electric grid on demand.
- The new design stores heat generated by excess electricity from solar or wind power in large tanks of white-hot molten silicon, and then converts the light from the glowing metal back into electricity when it's needed.

NASA's InSight lander 'hears' Martian winds

• NASA's InSight lander, which touched down on Mars last month, has provided the first-ever "sounds" of Martian wind on the Red Planet. InSight sensors captured a haunting low rumble caused by vibrations from the wind, estimated to be blowing between 10 to 15 miles per hour.

ISRO all set for GSLV-F11/GSAT-7A mission

- The Indian Space Research Organisation is all set to launch communication satellite GSAT-7A from Sriharikota on December 19.
- GSAT-7A is the 35th Indian Communication satellite built by the ISRO.
- GSAT 7A, a geo stationary communication satellite weighing 2250 kilogram is all set to provide communication services in Ku band over the Indian region.

3 astronauts return from International Space Station

• Three astronauts returned to Earth after more than six months aboard the International Space Station. A Russian Soyuz capsule with NASA's Serena Aunon-Chancellor, Russian Sergey Prokopyev and German astronaut Alexander Gerst of the European Space Agency landed on the snow-covered steppes in Kazakhstan.



China launches first satellite for space-based broadband

- China launched its first communication satellite to provide broadband internet services worldwide in an apparent bid to rival Google and other international firms.
- The satellite is the first in the Hongyun project planned by China Aerospace Science and Industry Corp (CASIC).

India will see two eclipses in 2019

- Astronomy enthusiasts and skygazers will be able to experience five eclipses in 2019, two of which will be visible in India.
- A partial lunar eclipse set to take place on July 16-17 will be visible in India and so will an annular (ring-shaped) solar eclipse on December 26

App/ Web Portal/ Toll Free

Twitter account to spread awareness about cybercrimes

- Home Ministry has launched a Twitter account to spread awareness about cybercrimes and normal precautions to be taken.
- The Twitter handles @CyberDost is aimed at enhancing people's basic knowledge about cybercrimes and precautions to be taken for prevention.

ECO Niwas Samhita 2018

- ECO Niwas Samhita 2018 an Energy Conservation Building Code for Residential Buildings launched
- Implementation of this Code expected to save 125 Billion Units of electricity per year by 2030, which is equivalent to 100 million ton of CO2 emission

E-Drishti Software

An 'e-Drishti' interface has been unveiled for the Union Railway Minister. This software includes
an interface which provides summary information on punctuality of trains for the previous day.
There is also an interface which provides information on current train running on the Indian
Railway network.



Cyber coordination center Portal

 A portal of cyber coordination center launched on the last day of three-day Conference of IGPs and state police chiefs.

Website of Cyber Coordination Centre

• The Prime Minister launched the website of the Cyber Coordination Centre. This is a one stop shop on all cyber related issues, whether it is cyber crime or cyber security. It would also act as bridge between law enforcement agencies on the one hand, and academia and private cyber security professionals on the other.

'Drone Olympics'

Defence Minister Nirmala Sitharaman launched a newly designed web page for 'Drone Olympics' (https://aeroindia.gov.in/Drone), scheduled to be held at Aero India – 2019 at Air Force Station, Yelahanka, Bengaluru.

SAMPANN software

• PM Modi dedicated SAMPANN software to the nation which is a Comprehensive pension management system developed by telecom department to help lakhs of pensioners.

