

Science and Technology

Everyday plastics emit greenhouse gases

- Plastic used in everyday objects from bottles to packaging emit greenhouse gases when exposed to sunlight, according to a study released.

Amazon droughts reducing forest's CO2 absorption

- A single season of drought in the Amazon rainforest can reduce its capacity to absorb carbon dioxide for years after the rains return, a NASA study has found.

Scientists to test land for LIGO

- The Environment Ministry has allowed scientists to test the suitability of land in Maharashtra's Hingoli district to host the India wing of the ambitious Laser Interferometer Gravitational Wave Observatory (LIGO) project.

Helium turns 150 on August 18, 2018

- On August 18, in 1868, helium was discovered by astronomers studying the sun during a total solar eclipse. The site of this discovery was none other than the Andhra coast. It is the only element to have been seen in the sun before it was known to exist on earth.

Complex wheat genome decoded

- In a major scientific breakthrough, international team of scientists including 18 Indian scientists decodes complex wheat genome.

Antidepressants may counter effects of brain ageing

- A commonly used antidepressant medication Prozac can counter some of the effects of brain ageing, such as sensory and cognitive decline, an MIT study suggests.

India may face nutritional deficiencies due to CO2 rise

- Millions of Indians are at the risk of becoming nutrient deficient by 2050, as rising levels of carbon dioxide (CO2) are making staple crops such as rice and wheat less nutritious, according to a study.

Physicists observe decay of Higgs boson

- Six years after tracking down the Higgs boson, the subatomic particle that confers mass on matter, physicists have “at long last” witnessed it decaying into tiny bits called “bottom quarks”.

World’s smallest medical robot sets Guinness record

- Scientists have set a new Guinness World Record by creating the smallest medical robot – a device measuring just 120 nanometres that could assist in future cancer and Alzheimer’s treatments.

Floating solar panels to be installed on dams

- The Marathwada Statutory Development Corporation has come up with a plan to install solar panels in the backwater of two dams to generate electricity. Jayakwadi dam in Aurangabad and Ujani dam in Solapur will be the sites of the solar power generation project.

Researchers feed seaweed to dairy cows to reduce emissions

- University of California researchers are feeding seaweed to dairy cows in an attempt to reduce methane emissions & make cattle more climate-friendly.

5.1 Inventions / Discover**Chinese scientists create first single-chromosome yeast**

- Molecular biologists at the Centre for Excellence in Molecular Plant Sciences in china used CRISPR-Cas9 genome-editing to create a single-chromosome yeast strain.

IISER Bhopal strike at the root of head and neck cancer growth

- Researchers at the Indian Institute of Science Education and Research (IISER) Bhopal have found that depleting the production of a specific protein kinase (p21-activated kinase 2 or PAK2), which is normally produced in excess in head and neck cancer, affects a chain of events that finally reduces the growth of head and neck cancer.

IIT-Madras powers up a desi chip

- IIT- Madras has developed the first of a family of six industry-standard microprocessors. The initial batch of 300 chips named RISECREEK and produced under Project Shakti, have been fabricated free at Intel’s facility at Oregon, U.S., to run the Linux operating system.

World’s first Hindi speaking realistic humanoid robot

- Ranchi man Ranjit Srivastava has developed Indian version of ‘Sophia,’ a social humanoid robot developed by a Hong Kong based company, named Rashmi which can speak Hindi, Bhojpuri and Marathi along with English.

Forty-four new exoplanets discovered

- Astronomer’s pooled data from NASA’s Kepler and the ESA’s Gaia space telescopes. They confirmed existence of these 44 exoplanets and described various details about them.

CSIR’s new patented Clot buster

- A new Clot buster, PEGylated Streptokinase – a Novel Biological Entity developed by Dr. Girish Sahni, DSIR and his team of inventors at CSIR-Institute of Microbial Technology (CSIR-IMTECH), Chandigarh is all set to revolutionize the treatment of ischemic strokes.

IGIB team finds a new target to reverse iron overload disease

- Using zebrafish, researchers at the Institute of Genomics and Integrative Biology (CSIR-IGIB) have successfully discovered a pathway that regulates hepcidin hormone production. The hepcidin hormone, released by the liver, is a central regulator of iron in the body.

200 million-year-old Pterosaur fossil found in the US

- Scientists unveiled a previously unknown species of giant pterosaur, the first creatures with a backbone to fly under their own power.

99-million-year-old beetle discovered

- Scientists have discovered a beetle trapped in amber that dates back to 99 million years, a finding that may help better understand the relationship between ancient flowering plants and pollinators.

JNCASR developed a new, robust form of gold

- Researchers from Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, have developed a new type of gold in the form of very small crystals, microcrystallites.

World's first 4D printing for ceramics developed

- Scientists have successfully developed the world's first 4D printing for ceramics that can be used to create complex, shape-changing objects.

Indian-American scientist finds simple way to predict IBD

- An Indian-American scientist Chander Mohan has identified as many as 50 protein biomarkers that can non-invasively detect inflammatory bowel disease (IBD) – a gut disorder that leads to diarrhoea, abdominal cramps, and weight loss.

New compound to strike H. pylori

- Researchers from National Institute of Cholera and Enteric Diseases (ICMR-NICED), West Bengal have assessed a compound (ellagic acid) against H. pylori and found that it can kill almost all clinical strains of this bacterium.

New drug target for antibiotic-resistant bacteria

- Researchers at Indian Institute of Technology (IIT) Roorkee have identified a protein (Hfq) in Acinetobacter baumannii bacteria that can be a potential drug target.

A universal flu vaccine identified

- Scientists have identified a potential universal influenza vaccine called the hemagglutinin (HA) stalk that could protect people against most strains of the virus.

5.2 Space Science

NASA names Sunita Williams, 8 others, for first space flights on commercial spacecraft

- The space agency has announced that the nine astronauts will launch on the first crewed test flights and missions of new commercial spacecraft built and operated by The Boeing Company and SpaceX.

NASA's Curiosity rover completes six years on Mars

- NASA's Curiosity rover a mission that has spotted evidence of liquid water as well as potential signs life and habitability on Mars has completed six years on the red planet.

ISRO'S Heaviest Satellite GSAT-11 set for launch from French Guiana

- Indian Space Research Organisation's (ISRO) heaviest satellite so far the GSAT-11 which the space agency had cleared for launch in June, will take off a spaceport in French Guiana on 30 November

Indian telescope spots distant radio galaxy

- Astronomers have used an Indian telescope Giant Metrewave Radio Telescope (GMRT) in Pune to discover the most distant radio galaxy ever known, located at a distance of 12 billion light-years.

World's first mission to touch the Sun lifts off

- NASA's Parker Solar Probe, mankind's first mission to 'touch' the Sun will perform the closest-ever observations of the Sun's outer atmosphere, called the corona.

ISRO to celebrate Sarabhai centenary, launch TV channel

- The Indian Space Research Organisation will have a year-long Vikram Sarabhai centenary celebration starting in August 2019 to honour visionary scientist. It plans to roll out a dedicated ISRO TV channel. Jammu, Agartala to get Space Research Technology Centres

Gaganyaan

- Gaganyaan, the human space flight Programme green-flagged and set for 2022 by Prime Minister Narendra Modi.

Chandrayaan-1 data confirms presence of ice on Moon

- Scientists have found frozen water deposits in the darkest and coldest parts of the Moon's polar regions using data from the Chandrayaan-1 spacecraft that was launched by India 10 years ago, NASA.

ESA satellite to improve weather forecast launched

- The Earth Explorer Aeolus satellite was launched successfully by the European Space Agency (ESA) a satellite that will measure winds around the globe and help improve weather forecasting.

China successfully sends twin navigation satellites

- China successfully sent twin navigation satellites into the space on a single carrier rocket. The Long March-3B carrier rocket was the 283rd mission of the Long March rocket series.

ISRO to send first Indian into Space by 2022

- Gaganyaan – India’s First Indian human mission will be launched by Indian Space Research Organisation (ISRO) by 2022.

NASA set to launch space laser to track Earth’s melting ice

- NASA is set to launch the Ice, Cloud and land Elevation Satellite-2 (ICESat-2), the most advanced laser instrument of its kind in to the space next month, to measure the changes in the heights of Earth’s polar ice.

Jupiter’s Great Red Spot reveals signs of water

- NASA scientists peering deep inside Jupiter’s Great Red Spot a storm that has been raging on the planet for over 350 years have detected signs of water above the planet’s deepest clouds.

5.3 App/ Web Portal/ Toll Free**IWAI launches Dedicated Portal for Cargo Owners and Shippers**

- The Inland Waterways Authority of India (IWAI) launched a dedicated portal to connect cargo owners and shippers with real time data on availability of vessels.

GI logo, tagline launched

- Commerce and Industry Minister Suresh Prabhu launched a logo and tagline for Geographical Indications (GI) to increase awareness about intellectual property rights (IPRs) in the country.

e-Pashu Haat portal

- Government has launched e-Pashu Haat portal (www.epashuhaat.gov.in) for connecting breeders and farmers of indigenous breeds.

Bidder Information Management System and Bhoomi Rashi – PFMS Linkage Portals

- Shri Nitin Gadkari launched Bidder Information Management System (BIMS) and Bhoomi Rashi and PFMS linkage – two IT initiatives of the Road Transport & Highways Ministry that are aimed at expediting pre construction processes relating to bidding and land acquisition respectively.

India Science, an Internet-based science channel

- Vigyan Prasar, under the guidance of the Department of Science and Technology (DST) has launched India Science (indiascience.in), an Internet-based science channel, to showcase the developments in science and technology, particularly from research institutions and laboratories based in India.

‘Shaur nahin’ mobile app

- Himachal Pradesh Chief Minister Jai Ram Thakur launched ‘horn not ok’ awareness campaign and ‘shaur nahin’ (no noise) mobile application.

TRAI Mobile Apps on UMANG platform

- The Telecom Regulatory Authority of India TRAI integrates its Mobile App DND 2.0 & MyCall with UMANG Platform with the objective of reaching out to consumers and safeguarding their interests.

“GoaMiles”

- Goa Chief Minister Manohar Parrikar and Tourism Minister Manohar Ajaonkar flagged off the Goa Tourism Development Corporation’s app-based taxi service in Panaji.

Mobile App Niryat Mitra

- Union Minister of Commerce & Industry and Aviation Suresh Prabhu launched Niryat Mitra, mobile App in New Delhi developed by the Federation of Indian Export Organisations (FIEO). It provides wide range of information required to undertake international trade

e-Mor software

- The e-Mor software is for strengthening cause of death reporting systems in hospitals and improves death audits with use of appropriate tools for classifying deaths. This can bridge the gap and lead to better death statistics and surveillance in India.

“PARIVESH”

- “PARIVESH” is an environmental single window hub for Environment, Forest, Wildlife and CRZ clearances launched by PM Modi.

PENCIL online portal

- PENCIL online portal for effective enforcement of the Child Labour Act and National Child Labour Project (NCLP) Scheme.

India Science Technology and Innovation portal

- The Union science ministry’s communication wing, Vigyan Prasar, has launched the India Science Technology and Innovation portal for information about the organisations carrying out research, those funding them.

Swachh Manch

- The web-based platform will allow stakeholders to create/invite/participate in volunteering opportunities around neighborhoods to the cause of ‘swachhata’.

“TRAINS AT A GLANCE (TAG)”

- The Ministry of Railways will be releasing its new All India Railway Time Table known as “TRAINS AT A GLANCE (TAG)” effective from 15th August, 2018.

“Pitch to MOVE”

- NITI Aayog has launched “Pitch to MOVE” – a mobility pitch competition that aims to provide budding entrepreneurs of India a unique opportunity to pitch their business ideas to a distinguished jury.

“Dial 100” Police App

- Madhya Pradesh Launches “Dial 100” Police App For Emergency Situations

BSNL WINGS – a VOIP based phone service launched

- Bharat Sanchar Nigam Ltd (BSNL) has launched BSNL WINGS a VOIP based service. In WINGS, there is no SIM or cable wiring as is a VOIP service through an app.

“Digital Screens”

- Ministry of Railways launches “Digital Screens” to spread awareness about Indian Railways Heritage. Digital Screens and QR code based posters are operational at 22 Railway Stations from Independence Day.

Microsoft, Apollo Hospitals unveil AI to predict cardiovascular disease risk

- Microsoft India and Apollo Hospitals had unveiled the ‘first-ever’ artificial intelligence-powered cardiovascular disease (CVD) risk score API (application program interface), designed to predict the risk of CVD in the Indian population.

Selfies app and Exoplanet Excursions virtual reality app by NASA

- The Selfies app and Exoplanet Excursions virtual reality app were released to celebrate the 15th anniversary of the launch of NASA's Spitzer Space Telescope.

Various applications under the eCourts project

- The Chief Justice of India Hon'ble Justice Dipak Misra launched various applications (e-filing, e-pay, and NSTEP (National Service and Tracking of Electronic Processes created under the eCourts project) for the benefit of the litigants and lawyers at an event in the Supreme Court of India.

National Logistics Portal

- A National Logistics Portal is being developed by the Ministry of Commerce and Industry to ensure ease of trading in the international and domestic markets.

NAA launches Consumer Helpline to receive Anti-Profiteering Complaints

- In a bid to encourage the consumers to file complaints against the companies who are not passing the GST benefits, the National Anti-profiteering Authority (NAA) has started a helpline number 011-21400643.

April – July 2018 Current Affairs Download – [Click Here](#)

General Knowledge Study Materials [Click Here for Download](#)

All subject Study Materials [Click Here for Download](#)

Whatsapp Group  [Click Here](#)