

Prelim Bits 28-12-2019

DNA Repairing Protein

- IIT Hyderabad discovers a protein that repairs a damaged DNA in humans and helps prevent diseases like cancer.
- The research highlights Nature has evolved techniques not only to protect DNA, but also to repair a damaged one so that catastrophic damage can be averted.
- The research was funded by Science and Engineering Research Board (SERB), Department of Science and Technology.
- Any damage to the DNA can result in outcomes that can range from unperceivably mild changes, such as the sudden appearance of a harmless mole, to diseases such as cancer.
- The retention of DNA integrity is therefore essential for proper function and survival of all organisms.

SERB

- Science and Engineering Research Board is a statutory body under the Department of Science and Technology, Government of India, established by an Act of the Parliament of India in 2009.
- The Board is chaired by the Secretary of Department of Science and Technology and shall have other senior government officials and eminent scientists as members.
- The Board was set up for promoting basic research in science and engineering and to provide financial assistance to scientists, academic institutions, R&D laboratories, industrial concerns and other agencies for such research.
- The Board has schemes for funding extramural research, for providing grants for start-up research and for using the scientific expertise of retired scientists.

Snow EX

- For a better understanding of how much water is contained in each winter's snowfall and how much will be available when it melts in the spring, NASA has launched a seasonal campaign as part of a five-year

programme called SnowEx, initiated in 2016-17.

- While the geographical focus of SnowEx is North America, NASA's overall target is optimal strategies for mapping global snow water equivalent (SWE) with remote sensing and models leading to a Decadal Survey "Earth System Explorer" mission.
- Within its geographic range, SnowEx assesses where snow has fallen, how much there is and how its characteristics change as it melts.
- It uses airborne measurements, ground measurements and computer modelling.
- The airborne campaign will fly radar and lidar (light detection and ranging) to measure snow depth, microwave radar and radiometers to measure SWE, optical cameras to photograph the surface, infrared radiometers to measure surface temperature, and hyperspectral imagers for snow cover and composition.
- Ground teams will measure snow depth, density, accumulation layers, temperature, wetness and snow grain size — the size of a typical particle.
- NASA currently has no global satellite mission to track and study SWE.
- NASA acknowledges any future snow satellite mission will require observations from an international collection of satellites.

NITI SDG Index

- NITI Aayog will publish the Sustainable Development Index - 2019 soon.
- The SDG India Index is intended to provide a holistic view on the social, economic and environmental status of the country and its States and UTs.
- The SDG India Index is an aggregate measure which can be understood and used by everyone—policymakers, businesses, civil society and the public.
- The Index tracks the progress of all the States and Union Territories (UTs) on a set of 62 National Indicators, measuring their progress on the outcomes of the interventions and schemes of the Government of India.
- It has been designed to provide an aggregate assessment of the performance of all Indian States and UTs, and to help leaders and change makers evaluate their performance on social, economic and environmental parameters.
- It aims to measure India and its States' progress towards the SDGs for 2030.
- NITI Aayog has constructed the SDG India Index spanning across 13 out of 17 SDGs (leaving out Goals 12, 13, 14 and 17).

Annual Flamingo festival

- The annual flamingo festival will be conducted in Nellore district of Andhra Pradesh, in first week of January 2020.
- More than 40,000 flamingos can be seen in action at the Pulicat lake during the season.
- Other Bird species which can be spotted during the festival are Black-tailed godwit, Kentish plover, painted storks, large and little egrets, grey pelicans, grey herons, and water birds like northern pintails, black-winged stilts, northern shovellers, common teal, seagulls, terns, sandpipers, and common coots.
- The lake supports a rich biodiversity and high biomass of fishes, prawns, crustaceans, coelenterates and planktons.

Nari Shakti Puraskar

- Nari Shakti Puraskar is formerly known as Stree Shakti Puraskar, literally meaning "Woman Power Award".
- It is India's highest civilian award for recognizing the achievements and contributions of women.
- The awards are given away by the President of India every year on 8 March, International Women's Day at Rashtrapati Bhavan in New Delhi.
- The Nari Shakti Puraskar is conferred on individual women, public and private institutions and public departments for their activism and/ or their contributions to the cause of women's empowerment.
- The award, instituted in the year 1999 by the Ministry of Women and Child Development, Government of India, is given in six institutional categories and two individual categories.
- The award carries a cash prize of rupees one lakh (INR 100,000) and a citation.

Economic Terminologies Recently in News

- **Non-Performing Assets (NPA)** - NPAs are recorded on a bank's balance sheet after a prolonged period of non-payment by the borrower (90 days of non-payment of interest or principle payment overdue in Indian context)
- **Gross Non-Performing Asset (GNPA)** - Sum of Total NPAs of a bank or banks under a central bank.
- **Net Non-Performing Asset (NNPA)** - NNPA is the total bad assets (actual) minus the provision left aside.

GROSS NPA VERSUS NET NPA

Basis For Difference	Gross NPA	Net NPA
Meaning	Sum of loans Defaulted	Default Loans – Provision for Default
Default Period	Ninety Days	Immediately
Actual Loss	Not Actual Loss	It is the Actual Loss
Causes	Poor government policies, industrial sickness, natural calamities etc.	Low Provision for Unpaid Debts
Effects	Equity and Company Goodwill	Profitability and Liquidity

- **Provision coverage ratio (PCR)** - Provisioning Coverage Ratio (PCR) refers to the prescribed percentage of funds to be set aside by the banks for covering the prospective losses due to bad loans.
- **Capital to risk-weighted assets ratio (CRAR)** - The ratio of a bank's capital to its risk, it ensure that the bank can absorb a reasonable amount of loss and complies with statutory Capital requirements; Higher CRAR indicates a bank is better capitalized.

Source: Indian Express and the Hindu