

Prelim Bits 24-12-2017

Huntington's disease

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- Huntington's disease (HD) is a fatal genetic disorder that causes the progressive breakdown of nerve cells in the brain.
- It deteriorates a person's physical and mental abilities during their prime working years and has no cure.
- It is known as the quintessential family disease because every child of a parent with HD has a 50/50 chance of carrying the faulty gene. \n
- Researchers have recently reported that treatment with a compound called "CTEP" improved memory and also prevents harmful protein build ups in the brain.

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Tadoba Tiger Reserve

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• Tadoba Andhari Tiger Reserve is located in Chandrapur district of Maharashtra.

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- It is Maharashtra's oldest and largest National Park.
- It is one of India's 47 project tiger reserves existing in India.
- The word 'Tadoba' is derived from the name of God "Tadoba" or "Taru," which is praised by local tribal people of this region.
- \bullet "Andhari" is derived from the name of Andhari River that flows in this area. $\ensuremath{\backslash} n$
- \bullet It is often referred to as "The Jewel of Vidarbha". $\ensuremath{^{\backslash n}}$

CRISPR

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• CRISPR stands for Clustered Regularly Interspaced Short Palindromic Repeats.

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 \bullet Researchers has recently used genome editing tool "CRISPR - Cas9" to partially treat the genetic deafness in mice. \n

• A single mistake in "Tmc1 gene" causes loss of inner ear hair cells leading to deafness.

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 Scientists believe that the world could one day help treat certain forms of genetic hearing loss in humans.

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- \bullet CRISPR Cas9 is a most prominent genome editing technique by targeting specific stretches of genetic code to edit DNA at precise locations. \n
- The technique allows researchers to permanently modify genes in living cells and organisms and to correct mutations at precise locations in the human genome to treat genetic causes of disease.
- It can be used to target multiple genes simultaneously and can also activate gene expression instead of cutting the DNA.

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Kaleswaram Project

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• Central government has recently granted environmental clearance to the Kaleswaram Project.

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- Pranahitha-Chevella Lift Irrigation Scheme was taken up in 2007 to utilise the water of Pranhita tributary of Godavari River.
- After the formation of Telangana, the project was redesigned into two sections.

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• The original component serving the Adilabad area was called the Pranahitha

project.

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• The second part is called Kaleswaram Project serving the Karimnagar, Warangal, Nizamabad and Medak districts.

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• Water from Godavari River after the confluence by the Pranahita tributary is lifted to provide lift irrigation facility.

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• Lift Irrigation project - Pumps are used to lift the water from canals or rivers at lower level to the area at higher level for irrigation purpose.

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Ganga Gram

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• Ganga Gram is a project for sanitation based integrated development of all 4470 villages along the River Ganga.

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 Ministry of Drinking Water and Sanitation is the nodal agency for implementation of the Ganga Gram Project.

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Pradhan Mantri Rojgar Protsahan Yojana (PMRPY)

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• PMRPY Scheme has been designed to incentivise employers for generation of new employment.

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• Government of India will be paying the 8.33% EPS contribution of the employer for the new employment.

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• This scheme has a dual benefit, where, on the one hand, the employer is incentivised for increasing the employment base of workers in the establishment.

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• On the other hand, a large number of workers will find jobs in such establishments.

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• A direct benefit is that these workers will have access to social security benefits of the organized sector.

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Source: The Hindu, PIB

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