Prelim Bits 09-04-2019

ARIIA Awards

- Atal Ranking of Institutions on Innovation Achievements (ARIIA) is launched by Ministry of Human Resources and Development.
- ARIIA systematically rank education institutions and universities primarily on innovation related indicators.
- It considers all major indicators which are commonly used globally to rank most innovative education institutions/ universities in the world.
- ARIIA ranking will certainly inspire Indian institutions to reorient their mind-set and build ecosystems to encourage high quality research, innovation and entrepreneurship.

NIRF

- The National Institutional Ranking Framework (NIRF) was established by Ministry of Human Resource Development.
- This framework outlines a methodology to rank Higher education institutions across the country.
- The parameters broadly cover “Teaching, Learning and Resources,” “Research and Professional Practices,” “Graduation Outcomes,” “Outreach and Inclusivity,” and “Perception”.

Battle of KanglaTongbi

- During WWII Japanese forces had planned to capture Imphal and the surrounding areas.
- Japanese forces defeated Indian forces at Tiddim (Mynmar) and established themselves firmly on the main Kohima – Manipur highway, started advancing towards KanglaTongbi.
- At KanglaTongbi, a small but determined detachment of British Indian forces put up stiff resistance against the advancing Japanese forces.
- The KanglaTongbi War Memorial is located in Imphal, Manipur

Karakoram Pass

- The Karakoram Pass is situated on the border of areas under the dominance of India (the territory of Jammu and Kashmir) and China (Xinxiang Autonomous Territory).

- It is the tallest pass in the midst of Leh in Ladakh and Yarkand in the Tarim Valley.
- The Karakoram Pass also plays a significant geological role in the disagreement between India and Pakistan about the dominance of Siachen Glacier Region right away towards the west of the Pass.
- The area around the pass is infertile with no foliage and snowstorms are a regular feature round the year.



Pseudomonas putida CSV86

- It is a unique strain of bacterium which can selectively remove the environment toxic, aromatic pollutants such as benzoate (sodium benzoate is used as a food preservative), benzyl alcohol and naphthalene, from soil.
- The bacterial strain has preference for aromatic compounds and organic acid as a food source even when glucose is available.
- The strain can degrade aromatics and organic acids simultaneously.
- The bacterial strain is a very good candidate for bioremediation or waste-water treatment.

Bioremediation

- Bioremediation is a process used to treat contaminated substance including water, soil and subsurface material, by altering environmental conditions to stimulate growth of microorganisms and degrade the target pollutants.
- Bioremediation is less expensive and more sustainable than other remediation alternatives.

Bio-augmentation

- Biological augmentation is the addition of bacterial cultures required to speed up the rate of degradation of a contaminant.
- If the indigenous variety do not have the metabolic capability to perform the remediation process, exogenous varieties with such sophisticated pathways are introduced.
- Bio augmentation is commonly used in municipal wastewater treatment to restart activated sludge bioreactors.

Even Horizon Telescope

- The Event Horizon Telescope is an international collaboration aiming to capture the first image of a black hole by creating a virtual Earth-sized telescope.
- Instead of constructing a giant telescope EHT links radio dishes across the

globe to create an Earth-sized interferometer to measure the size of black holes.

- The EHT project includes theoretical and simulation studies that are framing questions rooted at the black hole boundary.
- The following are two massive backhoes photographed by EHT

1. **Sagittarius A* -** It is at the center of Milky Way galaxy which has four million times the mass of sun.
2. **Monster black hole -** It is in an elliptical galaxy known as M87, and it is 1500 times more massive than Sag A*.

Source: PIB, the Hindu

SHANKAR IAS PARLIAMENT
Information is Empowering