Prelim Bits 02-05-2017

3D Bio-Printer

\n\n

\n
- Researchers have successfully generated **cartilage tissue using a 3D bioprinter,** an advance that could lead to new treatments for osteoarthritis.
\n
- Previously, Scientists have found **a new bio-ink for 3D printing with stem cells** that allows **printing of living tissue known as bio-printing.**
\n
- The new bio-ink contains two different polymer components: a natural polymer extracted from **seaweed** and a sacrificial synthetic polymer used in the medical industry.
\n
- The findings, could help printing complex tissues using the patient's own stem cells for surgical bone or cartilage implants, which could be used in knee and hip surgeries.
\n

\n\n

Bhitarkanika National Park

\n\n

\n
- With the onset of the **breeding season of estuarine crocodiles,** Bhitarkanika National Park will be closed for 3-months.
\n
- It is a national park located in **Kendrapara district of Odisha** in eastern India. It has been designated as a National Park since 1998. It is also a **Ramsar site.**
\n
- The national park is surrounded by the Bhitarkanika Wildlife Sanctuary. **Gahirmatha Beach and Marine Sanctuary** lies to the east, and separates swamp region cover with canopy of mangroves from the Bay of Bengal.
\n
- The sanctuary is the second largest mangrove ecosystem in India. The national park and wildlife sanctuary is inundated by a number of rivers -

Brahmani, Baitarni, Dhamra, Pathsala and others.
\n

- The park is home to the **saltwater crocodile, white crocodile,** Indian python, black ibis, wild pigs, rhesus monkeys, chitals, darters, cobra, water monitor lizard. **Olive ridley sea-turtles** nest on Gahirmatha and other nearby beaches.
\n
- Mammals including monkeys, jackals, common langur, otter, sambar deer, jungle cat, fox, Mongoose, wolf, fishing cats, hyena, were also present, according to the survey data.
\n

\n\n

Heart Attack – Blood Group

\n\n

\n

- People having a non-O blood group such as A, B or AB may be at an increased risk of a heart attack, new research has found.
\n
- The higher risk for cardiovascular events in non-O blood group carriers may be due to having **greater concentrations of von Willebrand factor** — a blood clotting protein, researchers said.
\n
- Non-O blood group carriers, specifically those with an A blood group, are known to have higher cholesterol.
\n
- And **galectin-3 protein,** which is linked to inflammation and worse outcomes in heart failure patients, is also higher in those with a non-O blood group.
\n

\n\n

Moon Village

\n\n

China and Europe are planning to build the first-ever “moon village” that could serve as a **launching pad for deep space missions** such as one to Mars, or even as a spot for space tourism and lunar mining.

\n



SHANKAR
IAS PARLIAMENT
Information is Empowering