

1. In Vitro Fertilisation (IVF)

Why in News:

- ▶▶ Setting a record of sorts, a 74-year-old woman delivered twins after five decades of her marriage through IVF in a private nursing home in Guntur city of Andhra Pradesh.

About IVF:

- ▶▶ IVF is a type of assisted reproductive technology used for infertility treatment and gestational surrogacy. I
- ▶▶ Fertilisation takes place where an egg is combined with sperm outside the body, in vitro - in glass. The process involves monitoring and stimulating a woman's ovulatory process, removing an ovum or ova (egg or eggs) from the woman's ovaries and letting sperm fertilise them in a liquid in a laboratory.
- ▶▶ After the fertilised egg (zygote) undergoes embryo culture for 2–6 days, it is implanted in the same or another woman's uterus, with the intention of establishing a successful pregnancy.

2. Beresheet:

Why in News:

- ▶▶ Beresheet, a private Moon mission by the Israeli non-profit organisation Space IL, crashed on the lunar surface on April 11, 2019.

About Beresheet:

- ▶▶ Beresheet means 'in the beginning' in Hebrew. The ₹720 crore mission was cheaper than even the Chandrayaan-2 mission, which costs ₹978 crore

Brief History of "Soft Landing" on Moon:

- ▶▶ In 1959, the Soviet Union crash-landed the first human-made object (Luna 2 spacecraft) intentionally on the Moon's surface.
- ▶▶ The first-ever soft landing was achieved by Luna 9, seven years later in 1966.
- ▶▶ For the next ten years, 12 Soviet and US spacecraft made soft landings including six human-crewed missions. After several failures, both countries discontinued Moon missions and therefore, there was no soft landing on the Moon from 1976 to 2013.

- ▶▶ On December 14, 2013, China successfully soft-landed its Chang'e 3 spacecraft on the Moon.

3. Dohdori Bridge:

- ▶▶ Defence Minister of India recently visited the demilitarised zone where North Korean leader Kim Jong-un met South Korean President Moon Jae-in last year, ending decades-long hostilities between the two neighbours.
- ▶▶ The **bridge connects South Korea with North Korea**

4. Joint Comprehensive Plan of Action (JCPOA)

What is JCPOA:

- ▶▶ The Joint Comprehensive Plan of Action , known commonly as the Iran nuclear deal or Iran deal, is an agreement on the Iranian nuclear program reached between Iran and the P5+1 (the five permanent members of the United Nations Security Council—China, France, Russia, United Kingdom, United States—plus Germany) together with the European Union.

Why in News:

- ▶▶ Iran is to lift all limits on its development of centrifuges used to enrich uranium - the latest step in reducing its commitments under a 2015 nuclear deal with world powers.

What does the Deal Do?

- ▶▶ In 2015, Iran reached a deal with six powers - the US, UK, France, China, Russia and Germany - that saw it limit its nuclear activities in return for sanctions relief.

Latest Crisis:

- ▶▶ President Donald Trump abandoned the deal in May 2018 and reinstated US sanctions.
- ▶▶ Iran refused and saw the value of its currency plummet and its inflation rate soar as the sanctions took effect.

5. National Highways and Protected Areas

Context:

- ▶▶ The first wildlife underpasses built under NH 44 could help reduce roadkill on the Kanha-Pench corridor dramatically.

National Highways and Protected Areas:

- ▶▶ National Highway 44 is India's longest highway from Srinagar to Kanyakumari

- ▶▶ NH 44 cuts through wildlife corridors connecting Kanha, Satpura, Pench, Bandhavgarh, Panna tiger reserves and at least four other protected areas
- ▶▶ NH 6 — India's second longest highway that runs across the breadth of the country from Surat to Kolkata, it passes through corridors around Melghat, Bor, Nagzira, Simlipal tiger reserves and seven other national parks and sanctuaries.

6. Article 371

Why in News:

- ▶▶ Union Home Minister assured the north-eastern States that the Centre would never touch Article 371 of the Constitution that grants special provisions to the region.

About Article 371:

- ▶▶ Article 371 of the Indian Constitution is connected to granting special provisions for some states of the Indian Union. As part of XXI and XXII of the Constitution of India, Article 371 grants some temporary, transition and special provisions to some states in the country.
- ▶▶ Ranging from Article 371-A to Article 371-J, this Article gives special provisions for the states of Maharashtra, Gujarat, Nagaland, Assam, Manipur, Andhra Pradesh, Sikkim, Mizoram, Arunachal Pradesh, Goa and Karnataka.
- ▶▶ The main objectives behind the Article 371 granting special provisions to some states are to meet the unique needs of the backward regions of these states, protect the economic and cultural interests of these regions, combat the local challenges and protect the customary laws in these regions.

7. Time Bank concept in Madhya Pradesh

Context: Madhya Pradesh's Happiness Dept. to open Time Bank

Background:

- ▶▶ In 2016 Madhya Pradesh became the first state in the country to set up Happiness Department

About Time Bank:

- ▶▶ The **Madhya Pradesh** government's Happiness Department plans to set up a Time Bank that would lend currency to an hour, which could be exchanged to learn a new skill without the need for any paper money.

How it works:

- ▶▶ Whenever a bank member needs a service or wants to acquire a skill, like reading, singing, they could exchange a credit, worth an hour, with another member knowing the skill.

- ▶▶ Bank would measure all kinds of skills and services through a common denominator – time, members would view them, and those offering it, as an equal. Those interested in becoming a Time Bank member could register on the department’s website as a volunteer.

8. Bandipur National Park

Why in News?

- ▶▶ The Supreme Court Granted the Centre additional four weeks to respond to its suggestion for constructing an alternative route to ensure that roads passing through the Bandipur Tiger Reserve are closed off permanently.

About:

- ▶▶ Bandipur Tiger Reserve, situated in Mysore District of Karnataka State, was among the first nine Tiger Reserves created in India at the launch of Project Tiger in 1973.
- ▶▶ From being private hunting grounds of Mysore Maharajas, it was later expanded to adjoin the Rajiv Gandhi National Park- Nagarhole in the north-west, Kerala’s Wayanad Wildlife Sanctuary in the south-west and Tamil Nadu’s Mudumalai wildlife Sanctuary in the South which now together constitute the Nilgiri Biosphere Reserve- the first ‘Biosphere Reserve’ of India

Flora and Fauna:

- ▶▶ There are several species of valuable timber trees including: Teak, Rosewood, Indian Kino Tree, Sandalwood (*Santalum album*)

Endangered Species in the Bandipur National Park:

- ▶▶ Tiger, four horned Antelope, Gaur, Elephant, panther, sloth bear, crocodiles, Mouse deer, python, osprey, pea fowl are Endangered Species.

Rivers through the National Park:

- ▶▶ The main perennial rivers of the Reserve are Nugu, Kabini and Moyar. The Nugu river flows in the middle of the reserve, whereas, the Moyar river forms the southern boundary between this reserve and Madumalai Wildlife Sanctuary. The Kabini River, across which a major irrigation dam has come up at Beechanahalli, forms the boundary between this Reserve and Nagarhole.

9. Nilgiri Tahr

Why in News?

- ▶▶ Nilgiri tahr's population up 27% in three years in TamilNadu. Its sightings in the **Mukurthi National Park** have risen from 568 in 2018 to 612 this year.

About Nilgiri Tahr:

- ▶▶ Nilgiri tahrs are stocky goats with short, coarse fur and a bristly mane.
- ▶▶ It is the State animal of Tamil Nadu

Conservation Status:

- ▶▶ Listed in Schedule I of Wildlife (Protection) Act, 1972
- ▶▶ Listed as **Endangered** on IUCN Red List

Habitat and Distribution:

- ▶▶ The Nilgiri tahr inhabits the **open montane grassland habitats** at elevations from 1200 to 2600 m (generally above 2000 m) of the South Western Ghats.
- ▶▶ Their range extends over 400 km from north to south, and **Eravikulam National Park** is home to the largest population. The other significant concentration is in the Nilgiri Hills, with smaller populations in the Anamalai Hills, Periyar National Park, Palni Hills and other pockets in the Western Ghats south of Eravikulam, almost to India's southern tip.

10. Anthropological Survey of India (AnSI)

Why in News:

- ▶▶ A recent publication by the Anthropological Survey of India sheds more light on killing of American John Allen Chau by the Sentinelese.

About AnSI:

- ▶▶ Anthropological Survey of India is the only research organisation to pursue anthropological research in a Governmental setup.
- ▶▶ The Anthropological Survey of India's genesis was from the Zoological and Anthropological section of the Indian Museum, which became the Zoological Survey of India in 1916. In 1945, Anthropology section of the Zoological Survey was carved out to become the Anthropological Survey of India (An.S.I) with Dr B.S.Guha as the founding Director, in 1946.
- ▶▶ It functions under the administrative control of Ministry of Culture, Government of India.
- ▶▶ The head office was shifted from Banaras to Calcutta in 1948.