Prelim Bits 23-09-2018

Kakrapur Atomic Power Station

\n\n

\n
- Two units of Pressurised heavy water reactors in Kakrapur Atomic Power station recently attained 'criticality'.
\n
- The term 'criticality' denotes initiation of self-sustaining nuclear fission chain reaction in the reactor.
\n
- Two years before, the units were shut due to leak of heavy water coolant, leaving both units non-functional.
\n

\n\n

First image from Parker Solar Probe

\n\n

\n
- The probe is named after Eugene Parker, a solar physicist, who first predicted the existence of the solar wind.
\n
- NASA’s Parker Solar Probe has beamed back the first-light data from each of its four instrument suites.
\n
- Wide-field Imager for Solar Probe’s (WISPR) is the only imager on the probe to take the first images during its journey to the Sun.
\n
- Over the next month, it will fly towards Venus, performing its first Venus gravity assist in early October.
\n
- The Parker Solar Probe’s first close approach to the Sun will be in November.
\n
- It will perform the closest-ever observations of the Sun’s outer atmosphere, called the corona.
\n
- The mission may also ascertain why the Sun occasionally emits high-energy

particles that are a danger to unprotected astronauts and spacecraft.
\n

\n\n

Ayushman Bharat - Pradhan Mantri Jan Aarogya Yojana

\n\n

\n
- Ayushman Bharat – Pradhan Mantri Jan AarogyaYojana (AB-PMJAY) was recently launched in Ranchi, Jharkhand.
\n
- It is the “world’s largest government funded healthcare program” targeting more than 50 crore beneficiaries.
\n
- It provides universal Healthcare through access of Health and Wellness Centers (HWCs) at the primary level and engagement of public and private sector at the secondary & tertiary levels.
\n
- The first component Health and Wellness centers covers both maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services.
\n
- First 'health and wellness centre' has been inaugurated in Bijapur district in Chhattisgarh.
\n
- The second component is the Pradhan Mantri Jan Arogya Yojana (PMJAY), which aims to reduce out of pocket hospitalisation expenses.
\n
- It will provide a cover of up to Rs. 5 lakhs per family per year, for secondary and tertiary care hospitalization.
\n
- It will provide cashless and paperless access to services for the beneficiary at the point of service.
\n
- The scheme is creating a cadre of certified frontline health service professionals called Pradhan Mantri Aarogya Mitras (PMAMs).
\n
- PMAM will be primary point of facilitation for the beneficiaries to avail treatment at the hospital and thus, act as a support system to streamline health service delivery.
\n

\n\n

Cyclone-30

\n\n

\n
- The country's biggest cyclotron facility Variable Energy Cyclotron Centre (VECC) became operational last week.
\n
- The cyclotron facility will produce radioisotopes vital for diagnosis and treatment of cancer.
\n
- Cyclone-30 is the machine housed at the Kolkata-based VECC under the Department of Atomic Energy (DAE).
\n
- It will produce radioisotopes for nuclear imaging specifically for cancer detection.
\n
- At present, many radioisotopes are imported while some are produced in Bhabha Atomic Research Centre (BARC) and remaining in cyclotrons facilities run by private hospitals.
\n

\n\n

\n\n

Source: PIB, Indian Express, Hindustan Times

\n

