

Prelim Bits 23-09-2018

Kakrapur Atomic Power Station

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• Two units of Pressurised heavy water reactors in Kakrapur Atomic Power station recently attained 'criticality'.

• The term 'criticality' denotes initiation of self-sustaining nuclear fission chain reaction in the reactor.

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 Two years before, the units were shut due to leak of heavy water coolant, leaving both units non-functional.

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First image from Parker Solar Probe

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• The probe is named after Eugene Parker, a solar physicist, who first predicted the existence of the solar wind.

• NASA's Parker Solar Probe has beamed back the first-light data from each of its four instrument suites.

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- 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.
- Over the next month, it will fly towards Venus, performing its first Venus gravity assist in early October.
- The Parker Solar Probe's first close approach to the Sun will be in November.

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• It will perform the closest-ever observations of the Sun's outer atmosphere, called the corona.

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• The mission may also ascertain why the Sun occasionally emits high-energy

particles that are a danger to unprotected astronauts and spacecraft.

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Ayushman Bharat - Pradhan Mantri Jan Aarogya Yojana

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• Ayushman Bharat - Pradhan Mantri Jan AarogyaYojana (AB-PMJAY) was recently launched in Ranchi, Jharkhand.

 It is the "world's largest government funded healthcare program" targeting more than 50 crore beneficiaries.

 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.

• 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.

• First 'health and wellness centre' has been inaugurated in Bijapur district in Chhattisgarh.

• The second component is the Pradhan Mantri Jan Arogya Yojana (PMJAY), which aims to reduce out of pocket hospitalisation expenses.

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 \bullet 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.

• The scheme is creating a cadre of certified frontline health service professionals called Pradhan Mantri Aarogya Mitras (PMAMs).

 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.

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- The country's biggest cyclotron facility Variable Energy Cyclotron Centre (VECC) became operational last week.
- \bullet The cyclotron facility will produce radioisotopes vital for diagnosis and treatment of cancer.
- Cyclone-30 is the machine housed at the Kolkata-based VECC under the Department of Atomic Energy (DAE).
- It will produce radioisotopes for nuclear imaging specifically for cancer detection.

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• 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.

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Source: PIB, Indian Express, Hindustan Times

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