

### **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'.

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• 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.
- $\bullet$  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.

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

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 $\bullet$  The mission may also ascertain why the Sun occasionally emits high-energy particles that are a danger to unprotected astronauts and spacecraft. \n

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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.

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

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• 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.

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 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.

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

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

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- 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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#### Cyclone-30

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- The country's biggest cyclotron facility Variable Energy Cyclotron Centre (VECC) became operational last week.
- The cyclotron facility will produce radioisotopes vital for diagnosis and treatment of cancer.

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- Cyclone-30 is the machine housed at the Kolkata-based VECC under the Department of Atomic Energy (DAE).
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- 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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