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POLYCRACK

- POLYCRACK is world's first patented heterogeneous catalytic process, which converts multiple feedstock into hydrocarbon liquid fuels, gas, carbon and water.
- Polycrack Plant can be fed with all types of Plastic, Petroleum sludge, Un-segregated MSW (Municipal Solid Waste) with moisture up to 50%, E–Waste, Automobile fluff, Organic waste including bamboo, garden waste etc., and Jatropha fruit and palm bunch.
- The process is a closed loop system and does not emit any hazardous pollutants into the atmosphere.
- The combustible, non-condensed gases are re-used for providing energy to the entire system and thus, the only emission comes from the combustion of gaseous fuels.
- Pre-segregation of waste is not required to reform the waste, It has high tolerance to moisture hence drying of waste is not required.
- This process will produce energy in the form of Light Diesel Oil which is used to light furnaces.
- Indian Railways commissions first Waste to Energy Plant based on POLYCRACK technology in Bhubaneswar.
- The capacity of this Waste to Energy Plant is 500 Kg waste per day.
- All types of waste including plastic and e-waste will be converted to Light Diesel Oil, which is used to light furnaces.

Bio-Rock

- Bio rock is the name given to the substance formed by electro accumulation of minerals dissolved in seawater on steel structures that are lowered onto the sea bed.
- The technology works by passing a small amount of electrical current through electrodes in the water.
- When a positively charged anode and negatively charged cathode are placed on the sea floor, with an electric current flowing between them, calcium ions combine with carbonate ions and adhere to the structure (cathode).

- This results in calcium carbonate formation, Coral larvae adhere to the $CaCO_3$ and grow quickly.
- Fragments of broken corals are tied to the bio rock structure, where they are able to grow at least four to six times faster than their actual growth as they need not spend their energy in building their own calcium carbonate skeletons.
- The Zoological Survey of India (ZSI), with help from Gujarat's forest department, is attempting for the first time a process to restore coral reefs.
- Under the plan a biorock structure or mineral accretion technology was installed one nautical mile off the Mithapur coast in the Gulf of Kachchh, it will use solar panels that float on the surface as a power source.

Madhavpur Mela

- Madhavpur Ghed, in Porbandar district a small but culturally significant village.
- It is the place where, according to folklore, Lord Krishna married Rukmini, the daughter of King Bhishmaka.
- Madhavpur lies on the seashore, close to Porbandar, a 15th century Madhavrai temple marks the site.
- The annual fair Madhavpur Mela is held here will commence a day after the Ram Navami festival.
- A colourful chariot carrying the idol of Lord Krishna circumnavigates the village and the festivities usually continue for five days.
- Madhavpur Mela will mark the cultural integration of Gujarat with the North-East under the Ek Bharat, Shrestha Bharat.
- The eight States of the Northern Eastern Region will participate in a big way during the Madhavpur Mela.
- The week-long 'Utsav' will see a vibrant cultural trail of art, dance, music, poetry, story-telling and folk drama from Arunachal Pradesh, Manipur and other North-Eastern States with the aim to integrate the rich cultures of the two regions.

Bhakta Ramadasu

- Kancharla Gopanna (c. 1620 – 1680), popularly known as Bhakta Ramadasu, was a 17th-century Indian devotee of Lord Rama and a composer of Carnatic music.
- He lived in the village of Nelakondapalli, near the town of Bhadrachalam,
- His contemporaries include the stalwarts of Telugu literature such as

Tallapaka Annamayya, Tyagaraja, Kshetrayya, and Shyama Sastri.

- In 17th century he constructed Sri Sitaramachandra Swamy temple in Bhadrachalam.
- His devotional lyrics to Rama are famous in South Indian classical music as Ramadaasu Keertanalu.
- He also wrote Dasarathi Shatakamu, a collection of nearly 108 poems dedicated to the son of Dasaratha (Lord Rama).

Gandhi an Anthropologist

- Anthropological Survey of India (AnSI) has published a journal "Gandhian insights into applied anthropology".
- The journal was published as part of the commemoration of Gandhi's 150th birth anniversary.
- The journal had 10 essays dedicated to Gandhian thoughts from the perspective of anthropology.
- According the the journal Gandhi's writings, teaching and life so far has been the subject of interest of historians and political scientists but a closer look will point out that Gandhi and his life has been centered in anthropology.

Coast Guard Ship 'Annie Besant'

- The recently inducted Indian Coast Guard Ship Annie Besant has reached its base harbour at Chennai.
- The ship Annie Besant is the third Fast Patrol Vessel of the 'Priyadarshini' class.
- The ship has been indigenously designed and built and was commissioned at Khidderpore Dock, Kolkata.
- The ship ICGS Annie Besant is fitted with modern navigational and communication equipment and sensors.
- It is capable of undertaking multi-faceted maritime operations such as Surveillance, Search and Rescue and Interdiction.

Source: The Hindu, PIB, AIR

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