

Prelims Focus - 15th April 2024

written by iaseexam.com | 15/04/2024



Khavda Renewable Energy Park

In News: Adani Green Energy Ltd (AGEL) recently established the world's largest renewable energy park in Gujarat's Khavda region.

- It is the sector's biggest renewable energy park. It is located at Khavda in Gujarat's Kutch area, boasting an impressive 45 GW ability predominantly fueled by solar energy.
- The location has the second-best solar radiation in the country after Ladakh and wind speeds five times that of the plains.
- Situated just one kilometer from the international border with Pakistan, the power park maintains a buffer sector manned by the Border Security Force (BSF).
- Originally accessed best by means of a modest airstrip without air visitors control, the site now gears up for a significant clean energy venture. It spans 538 square kilometres, approximately five times the size of Paris.
- **Investment:** AGEL will make investments about Rs 1.5 lakh crore to generate 30 megawatts of easy energy. It could include 26 GW of sun and four GW of wind capability.
 - The Khavda Park, at its top, is projected to generate 81 billion units of energy, a quantity able to power entire countries including Belgium, Chile and Switzerland.

Fort Emmanuel

In News: History buffs need steps to conserve the laterite-brick remnants of Fort Emmanuel, which was built along the beachfront by the Portuguese in 1503.

- It is a ruined castle situated at Fort Kochi Beach in Kochi, Kerala. It was at the beginning constructed in 1503 and completed in 1538.
- It was a picture of the strategic alliance between the Maharajah of Kochi and the Monarch of Portugal, after whom it was named.
- It was a large form, and the entire township was within its confines. It greatly helped in strengthening the Portuguese occupation of the location.
- Fort Kochi remained in Portuguese ownership till 1683, when the Dutch colonial troops captured the territory and destroyed the Portuguese establishments.
- The Dutch held the castle of their ownership till 1795, when the British took control by defeating the Dutch. By 1806, the Dutch, and later the British, had destroyed most of the citadel walls and its bastions.
- Foreign control of Fort Kochi resulted in 1947 with Indian independence. Now handiest the stays of this fort exist, reminding us of its historical significance.

Platelets

In News: Researchers have recently developed synthetic platelets that can be used to stop bleeding and enhance healing at the site of an injury.

- Platelets, or thrombocytes, are small, colorless cellular fragments in our blood that help in clotting. They are our body's natural bandage to stop bleeding.
- **Where are platelets made?**
 - They form within the soft tissue of your bones (bone marrow). The largest cells in bone marrow (megakaryocytes) make platelets.
 - They form in the form of a plate, that's where they get their call.
 - They are smaller than purple or white blood cells.
- **How do platelets manage bleeding?**
 - If one of the blood vessels gets broken, it sends out signals to the platelets. The platelets then rush to the website of damage and form a plug (clot) to repair the damage.
 - The system of spreading throughout the surface of a damaged blood vessel to stop bleeding is called adhesion.
 - This is due to the fact that when platelets get to the web site of the injury, they grow sticky tentacles that help them stick (adhere) to each other.
 - They also send chemical signals to attract more platelets.
 - The additional platelets pile onto the clot in a technique referred to as aggregation.
- **What is a healthy platelet count?**
 - A regular platelet can be counted from 150,000 to 450,000 platelets per microliter of blood.
 - Having more than 450,000 platelets is a condition referred to as thrombocytosis; having less than 150,000 is known as thrombocytopenia.