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GALÁPAGOS ISLANDS

This article covers "Daily Current Affairs" and the topic details "Galápagos Islands". This topic has relevance in the Geography section of the UPSC CSE exam.

GS 1: Geography

Why in the news?

Recently, scientists made discoveries of two previously unknown coral reefs and identified two uncharted seamounts in the Galapagos Islands.

About Galápagos Islands:

The Galápagos Islands, situated in the vast expanse of the Pacific Ocean approximately 600 miles off the coast of Ecuador

Key Aspects of the Galápagos Islands:

- **Geographic Location:** The Galápagos Archipelago comprises 19 islands, including 13 larger islands and 6 smaller ones, along with numerous islets and rocks. This vast expanse covers over 17,000 square miles and is distributed on both sides of the Equator.
- **Geological Formation:** The Galápagos Islands owe their dramatic, rugged landscapes to repeated volcanic eruptions. Despite their pristine appearance, these islands are relatively young compared to most oceanic archipelagos. The largest and youngest islands, Isabela and Fernandina, are less than one million years old, while the oldest islands, such as Española and San Cristóbal, are estimated to be between three to five million years old. Mount Azul, standing at 5,541 feet, is the highest point in the Galápagos.
- **Climate:** The Galápagos Islands are characterized by low rainfall, low humidity, and relatively cool air and water temperatures. These environmental conditions have contributed to the islands' unique ecosystems and have had a profound impact on the evolution of their wildlife.
- **UNESCO World Heritage Site:** In recognition of its extraordinary natural heritage, the Galápagos Islands were designated as a UNESCO World Heritage site in 1978. This status underscores their global importance for scientific research and conservation.

Biodiversity of the Galápagos:

The Galápagos Islands are renowned for their rich and diverse flora and fauna, much of which is endemic to the region. Notable species include:

- **Giant Galápagos Tortoise (*Chelonoidis nigra*):** These iconic reptiles are among the most famous inhabitants of the islands. They come in various shapes and sizes on different islands, showcasing remarkable adaptability.
- **Marine Iguana (*Amblyrhynchus cristatus*):** The Galápagos are the only place in the world where marine iguanas exist. They have adapted to feed underwater and are excellent swimmers.
- **Flightless Cormorant (*Phalacrocorax harrisi*):** As the name suggests, these cormorants have lost their ability to fly. They are excellent divers and have evolved on the islands without natural predators.
- **Galápagos Penguin (*Spheniscus mendiculus*):** This is the only penguin species that lives in the Northern Hemisphere. The Galápagos penguin thrives in the archipelago's unique marine environment.

Understanding Seamounts:

In addition to the terrestrial wonders of the Galápagos, the surrounding waters feature underwater formations known as seamounts.

Key characteristics of seamounts include:

- **Underwater Mountains:** Seamounts are underwater mountains with steep sides that rise from the seafloor. They are often remnants of extinct volcanoes and exhibit diverse features like craters and linear ridges.
- **Diversity Hubs:** Seamounts function as "oases of life" in the deep ocean, supporting higher species diversity and biomass compared to the surrounding seafloor. They also provide a substrate for various organisms to attach and grow.
- **Global Distribution:** Seamounts can be found in every ocean basin around the world, making them vital areas for ecological research and exploration.

Q.1 Galápagos Islands is located in:

1. Atlantic Ocean
2. Pacific Ocean
3. Indian Ocean
4. Black Sea

ANSWER: B

Q.2 Consider the following statements regarding seamounts:

1. Seamounts are typically underwater mountains with steep sides rising from the seafloor.
2. Most seamounts are remnants of active volcanoes.
3. They are primarily found in the Atlantic Ocean.

How many of the above statement/s is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

ANSWER: B

Q.3 Discuss the significant ocean relief features and their geological origins. How do these features influence marine ecosystems, weather patterns, and human activities? Provide examples to support your answer.

Rishabh



Yojna IAS
योजना है तो सफलता है