Denali Fault

A new research has revealed the origins of the **Denali Fault**, the **tectonic boundary** that gave rise to **Denali mountain in Alaska,** North America's highest mountain**.**

- The **Denali fault** was formed from the **collision** of an **oceanic plate** called the **Wrangellia Composite Terrane with the North American plate** between **72 million and 56 million years ago.**
  - The study also found evidence of **inverted metamorphism**, where **high-pressure rocks are positioned above low-pressure ones** due to tectonic activity.
- **About Fault: Fault or crack** gives rise to **Block mountains**. E.g., **Satpura and Vindhya mountains.**
  - **Block mountains** are formed when **large areas of land are broken and displaced vertically.** They are also known as **fault-block mountains.**
- **Types of Fault:**
  - **Strike-Slip Faults:** These faults occur when tectonic plates **slide horizontally** with **minimal vertical movement.** E.g., **Denali Fault**.
  - **Normal Faults:** These faults occur when **one rock block slides downward**, separating from the adjacent block. E.g., **East African Rift Valley.**
  - **Reverse Faults (Thrust Faults):** These faults occur when the **upper block moves up and over the lower block.**

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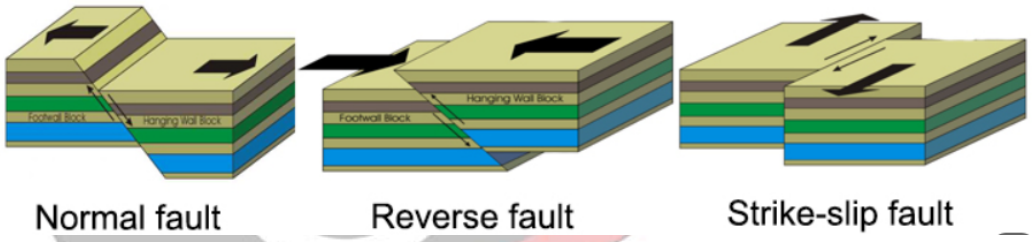

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