

www.vishnuias.com



Topic wise content



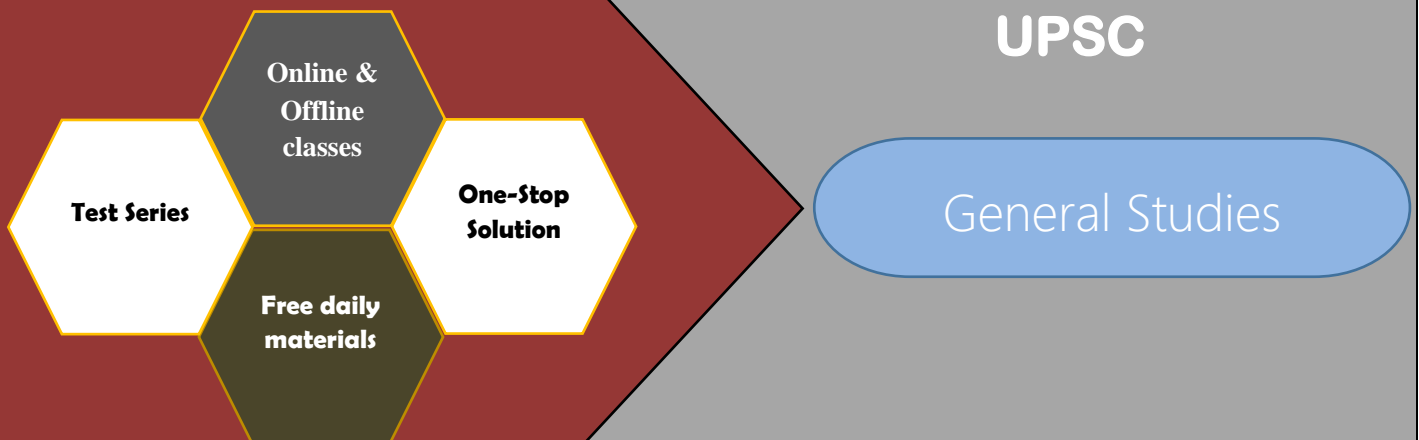
<https://t.me/vishnuiasmentor>



<https://www.youtube.com/channel>

Sun Halo/Kaleidoscope Effect

Notes for civil services preparation



Sun Halo/Kaleidoscope Effect

The people of Bangalore witnessed a bright rainbow ring around the sun for a few moments - a rare optical and atmospheric phenomenon called “22 degree circular Halo”.

Key Point



- The phenomenon popularly known as the **22 degree circular halo of the sun or occasionally the Moon** (also called a moon ring or winter halo), **occurs** when the sun’s or moon’s rays get deflected/refracted through the hexagonal ice crystals present in cirrus clouds.
- This is **also called the Kaleidoscopic Effect.**
- These halos **are called 22-degree halos**, as the halo or ring has an **apparent radius of 22 degrees** around the sun/moon.
- **Circular halos specifically are produced by cirrus clouds**, which are thin, detached, hair-like. These clouds are formed very high up in the atmosphere, at a height of over 20,000 feet.
- Just like a rainbow, a halo is visible when viewed from the right angle — sometimes appearing just white but often with colours of the spectrum also clearly present.

- The halo is the **brightest at the inner edge** of the circular disk, with no light inside the disk as no light is refracted at smaller angles.
- **Red** light is **refracted less** than other colours of light, so the halo's **inner edge is reddish**. Other shades typically tend to **overlap and wash out**.

