BENEVOLENT IAS ACADEMY

1626 – A, Sri Vinayaga Complex,
Hope College, Peelamedu (PO),
Coimbatore – 641 004.
Cell: +91-9787731607, 9787701067.
Web: www.benevolentacademy.com, E-Mail: benevolentacademy@gmail.com

TODAY'S IMPORTANT CURRENT AFFAIRS

UPSC PRELIMS

Date: 28.10.2025

Source: The Hindu

TODAY'S DROPS OF NEWS:

SUBJECT	IN NEWS
POLITY	---
ECONOMY	---
GEOGRAPHY	Cyclone set to cross A.P. coast; red alert issued.
HISTORY AND ART & CULTURE	---
ENVIRONMENT	---
SCIENCE & TECH	---
MISCELLANEOUS	---

GEOGRAPHY

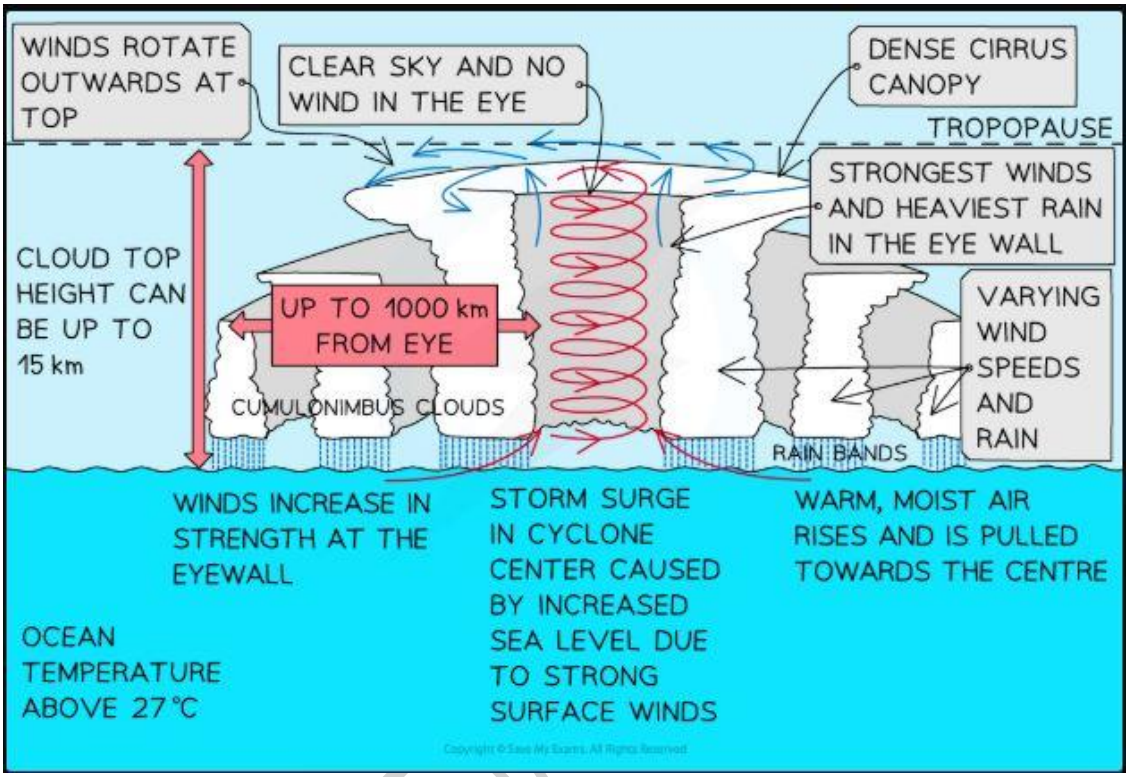
In news: Cyclone set to cross A.P. coast; red alert issued.

Cyclone: Cyclones are rapid inward air circulation around a low-pressure area. The air circulates in an anticlockwise direction in the Northern hemisphere and clockwise in the Southern hemisphere.

- Cyclones are usually accompanied by violent storms and bad weather.

Classification

There are two types of cyclones:



- ✓ **Tropical cyclones;** and
- ✓ **Extra Tropical cyclones** (also called Temperate cyclones or middle latitude cyclones or Frontal cyclones or Wave Cyclones).

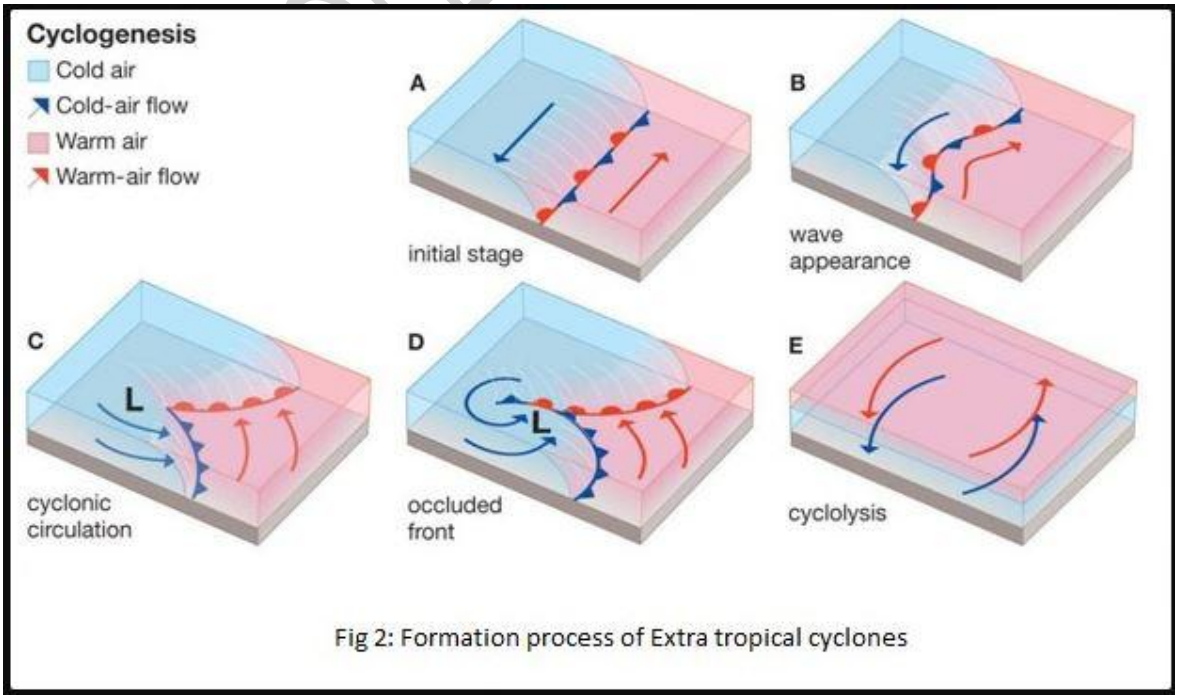


Fig 2: Formation process of Extra tropical cyclones

❖ The World Meteorological Organisation uses the term 'Tropical Cyclone' to cover weather systems in which winds exceed 'Gale Force' (minimum of 63 km per hour).

Feature	Tropical Cyclone	Temperate Cyclone
Formation Region	Over warm tropical oceans, between 5°–30° latitude in both hemispheres	**Over mid-latitudes, 35°–65°, mostly along land-ocean boundaries**
Energy Source	Latent heat from warm ocean water (≥26°C)	Temperature contrast between warm and cold air masses (frontogenesis)
Structure	Symmetrical, circular, tightly packed isobars	Asymmetrical, comma- or 'inverted V'-shaped, with fronts
Vertical Extent	Up to the tropopause (12–14 km), vertical structure	Slanting, from surface to tropopause
Pressure	Very low central pressure (below 950 mb)	Less intense low pressure (970–990 mb)
Wind Velocity	Very high (100–250 km/h or more)	Moderate (30–150 km/h typical, can reach 100–150 km/h)
Shape	Elliptical or nearly circular, distinct "eye"	Asymmetrical, 'inverted V' or comma shaped, no eye
Movement/Path	East to west, then poleward	West to east, guided by westerlies
Area Covered	Smaller (100–1000 km diameter)	Larger (1000–3000 km diameter)
Seasonality	Seasonal, mostly late summer/autumn	Irregular, mostly in winter
Impact on India	Affect both coasts, east more vulnerable	Bring winter rains to NW India as Western Disturbances