

# UPSC PREPARATION

## Cyclone Gulab

India Meteorological Department said cyclone Gulab began its landfall process on Sunday. The system hit the landmass between Kalingapatnam in Andhra Pradesh and Gopalpur in Odisha. Heavy rains lashed parts of Andhra Pradesh. Telangana is on high alert as the cyclone passes.

### About Cyclone Gulab

- A new depression has formed over the east-central Bay of Bengal which intensified into cyclone Gulab.
- The cyclone affected the coasts of south Odisha north Andhra Pradesh. It made landfall triggering heavy rains along with strong winds over north coastal Andhra Pradesh and adjoining south coastal Odisha.
- It comes under the category of the **cyclonic storm** according to IMD.
- Being a [monsoon](#) system, it naturally holds excess moisture compared to storms of pre-monsoon and post-monsoon periods.
- A couple of unique meteorological factors are also helping the system intensify and retain moisture.
- Because of weak to moderate negative Indian Ocean Dipole (-IOD), the equatorial Rossby waves (natural planetary waves) could have transferred a substantial amount of energy (moisture) to this system.

### Some facts about Cyclone Gulab

<b>What kind of a cyclone is Gulab?</b>	It is a tropical cyclone
<b>What is the meaning of the name 'Gulab'?</b>	The word 'Gulab' (pronounced as Gul-Aab) means Rose.
<b>Which country has given the name 'Gulab'?</b>	Pakistan proposed the name Gulab.
<b>How are cyclones named?</b>	<ul style="list-style-type: none"><li>• Countries surrounding a particular basin name the storms originating in that basin, usually years before they even form. Therefore, all the 13 countries sharing the Indian Ocean basin have already provided a list of 169 names, with each country proposing 13 names.</li><li>• The names are chosen one after the other from this list, approved by the World Meteorological Organisation (WMO).</li></ul>

Recent Cyclones in the Indian ocean

Name	Location	Region affected
Cyclone Gulab	Bay of Bengal	North Andhra Pradesh and adjoining Odisha coasts
<a href="#">Cyclone Tauktae</a>	Arabian Sea	Southern Gujarat
Cyclone Yaas	Bay of Bengal	West Bengal and adjoining Odisha coasts
<a href="#">Cyclone Nisarga</a>	Arabian Sea	Alibag in Mumbai, Maharashtra
<a href="#">Cyclone Amphan</a>	Bay of Bengal	Odisha and West Bengal
Cyclone Kyarr	Arabian Sea	Moved towards the Gulf of Aden from the Indian coast
Cyclone Maha	Arabian Sea	Gujarat
Cyclone Vayu	Arabian Sea	Gujarat
Cyclon Hikka	Arabian Sea	Oman
Cyclone Fani	Bay of Bengal	Odisha, West Bengal, Andhra Pradesh and East India

## Classification of cyclones

[Indian Meteorological Department](#) (IMD), classified the low-pressure systems in the Bay of Bengal and the Arabian Sea on the basis of maximum sustained wind speed.

Type of disturbance	Wind speed
Low-pressure area	Less than 31 km per hour
Depression	31-49 km per hour
Deep depression	50-61 km per hour
Cyclonic storm	62-88 km per hour
Severe cyclonic storm	89-117 km per hour
Severe cyclonic storm	118-167 km per hour
Very severe cyclonic storm	168-221 km per hour
Super cyclonic storm	222 km per hour and higher

**Based on the above classification, Cyclone Gulab comes under the category of Cyclonic storm**

## Role of IMD

- Indian Meteorological Department (IMD) is the Indian agency to monitor the development of tropical cyclones in its area of responsibility.
- It provides advisory information to ICAO, DGCA, Meteorological Watch offices in the country and neighbouring countries as well.
- It gives warnings regarding rainfall, wind speeds, sea conditions, fisherman alerts, and impacts of cyclones.
- It has issued a 'Red' alert indicating heavy to very heavy rainfall (64.5mm to 204.4mm in 24 hours) over coastal Andhra Pradesh, Chhattisgarh, Telangana and Vidarbha in Maharashtra.
- **Warnings of IMD**
  - Light to moderate rainfall at most places with heavy to very heavy & extremely heavy falls at isolated places very likely over south Chhattisgarh; heavy to very heavy falls at isolated places over Odisha, Telangana & Vidarbha and heavy rainfall at isolated places over coastal West Bengal & North Chattisgarh.
  - Sea condition will be 'high' over Northwest and adjoining Westcentral Bay of Bengal and along and off Odisha, West Bengal and North Andhra Pradesh
  - A tidal wave of about 0.5 m height above the astronomical tide is likely to inundate low lying areas of Srikakulam, Sompeta, Vizianagaram, Ganjam districts during the time of landfall.
  - The fishermen are advised not to venture into the northwest & adjoining the west-central Bay of Bengal and along & off Odisha, West Bengal & North Andhra Pradesh coasts.
- **Actions suggested by IMD**
  - Avoid staying in a vulnerable structure
  - Avoid going to areas that face water logging problems often.
  - Check for traffic congestion in your route before leaving for your destination.
  - Follow traffic advisories issued in this regard
  - Follow IMD warnings for updates.