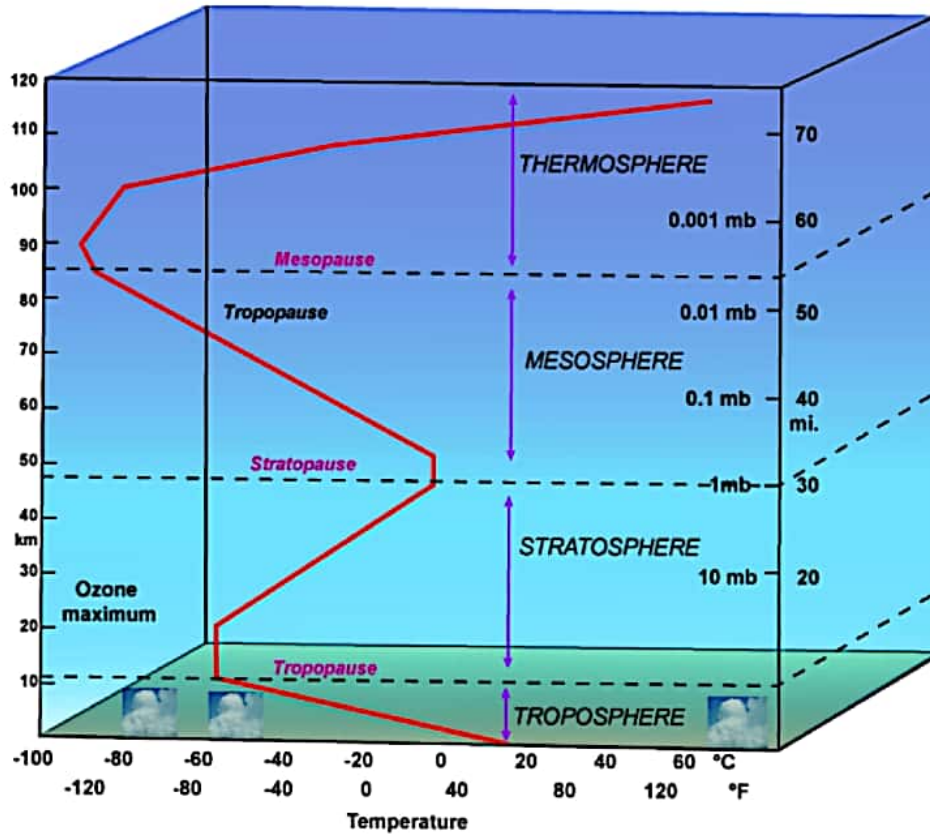
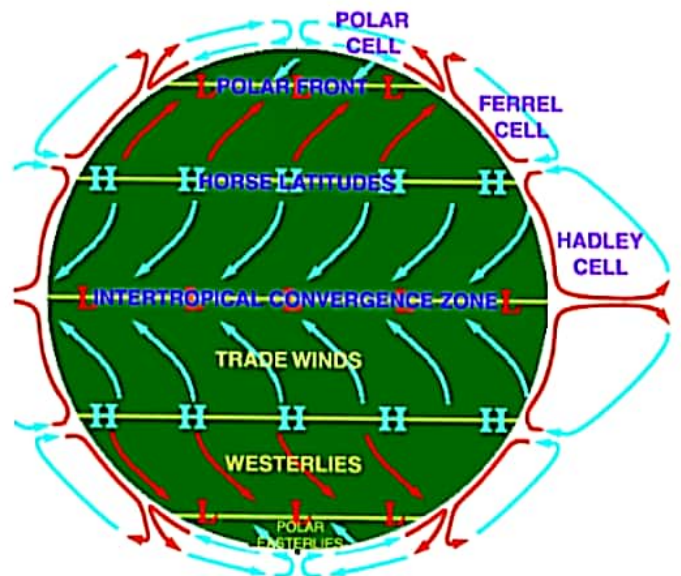
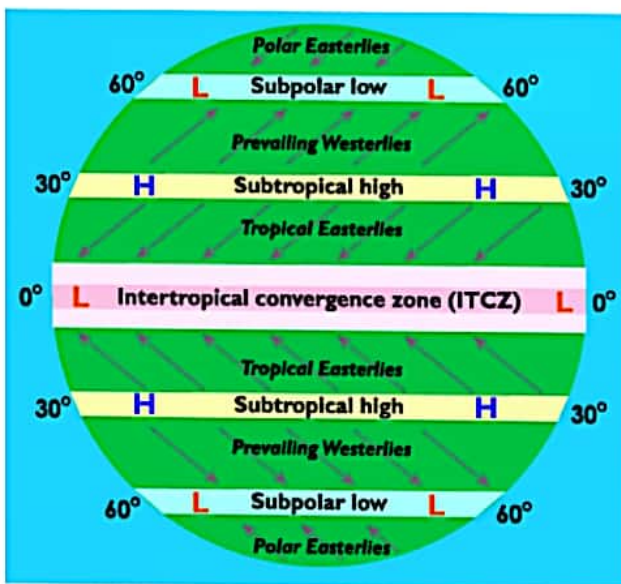


# Structure of Atmosphere

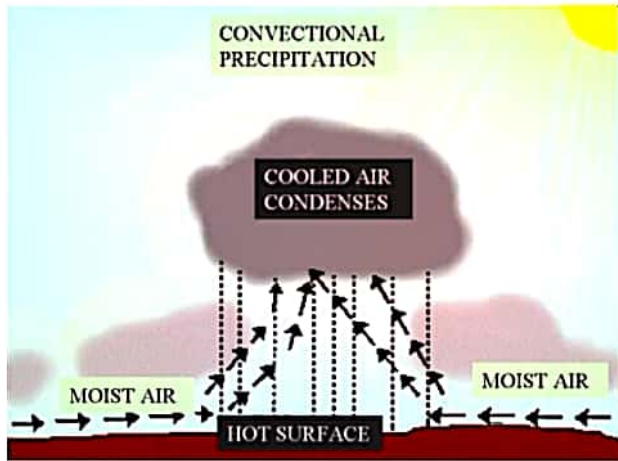


# Pressure system of the world

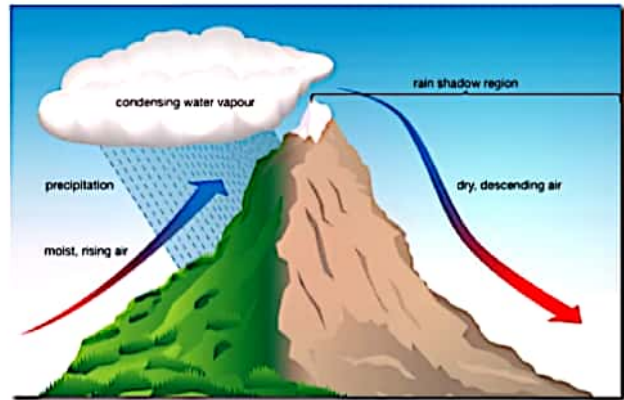


# Types of rainfall

## Convictional rainfall

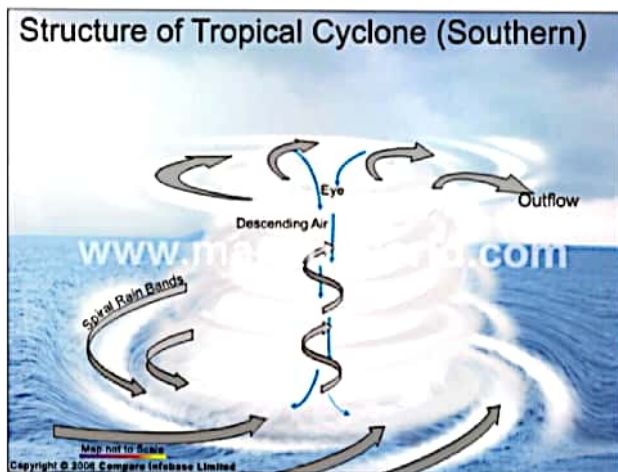


## Orographic rainfall

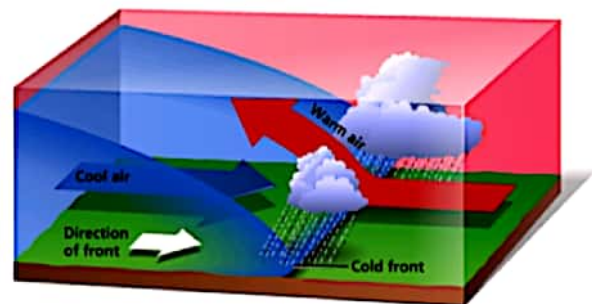


# Types of rainfall

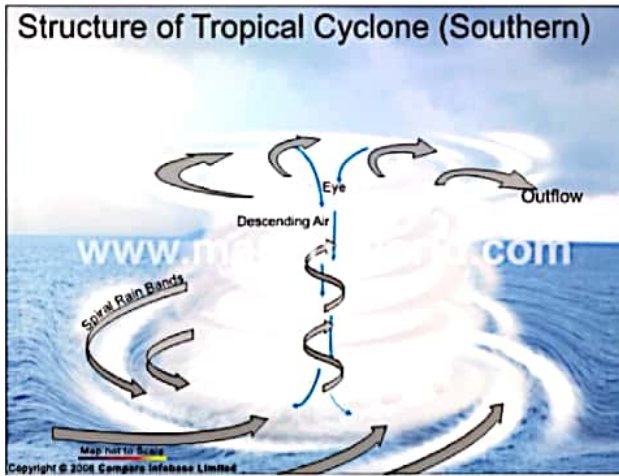
## Cyclonic rainfall



## Frontal rainfall



# Cyclone formation and characteristics



- 1) Intense LP system
- 2) Air converges towards the centre
- 3) Closed isobars
- 4) In Northern hemisphere convergence – anti-clockwise
- 5) In Southern hemisphere convergence – clockwise
- 6) Direction – East to west in influence of Trade winds
- 7) Formation- between 5 to 30 degree in both hemi.

## UPSC Prelims 2013

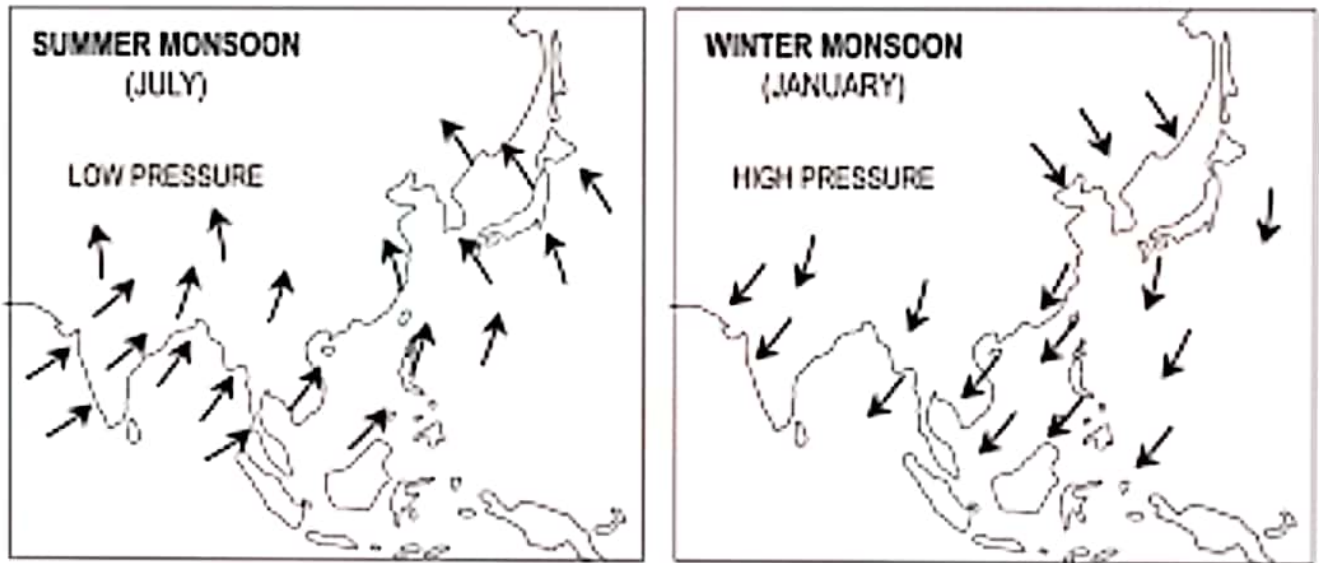
Q. Which of the following is/are characteristics of equatorial forests?

1. Presence of tall, closely set trees with crowns forming continuous canopy
2. Co-existence of a large number of species
3. Presence of numerous variety of epiphytes

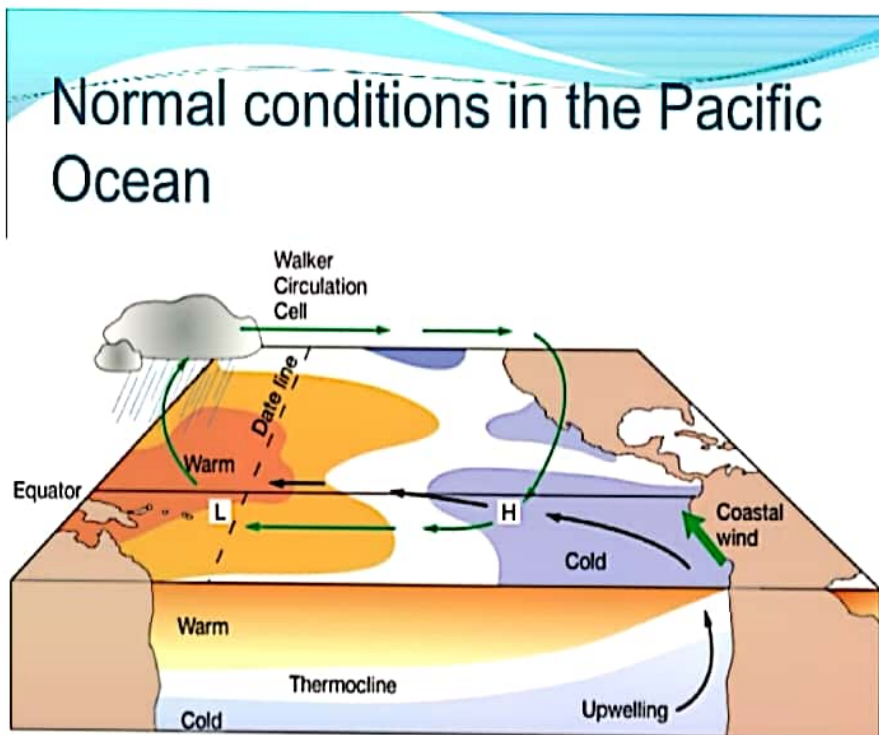
- a) 1 only
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans.

# Indian Monsoon



## Implications of El-Nino on Indian Monsoon



(a) Normal conditions

- Association of El-Nino or Western Pacific Pool with Indian Monsoon
- There can be other atmospheric cells associated with Western Pacific pool

# Koppen's classification of Climate

- Wladimir Koppen of Germany published his scheme in 1901 and modified it in 1918, 1931 and 1936.
  - Based on mean temperature and rainfall
  - Inspired by French botanist Candolle's classification of vegetation done in 1874.
- Candolle's classification
    - I. Megatherm
    - II. Xerophytes
    - III. Mesotherm
    - IV. Microtherm
    - V. Hekiskootherm

## Koppens classes

- I. A: Tropical Rainy Climate
- II. B: Dry Climate
- III. C: Middle Latitude rainy climate with mild winters
- IV. D: Middle latitude rainy climate with severe winter
- V. E: Polar climate with no warm season

## Sub Classes

m-Monsoon f-full season fair  
w-Winter dry s-Summer dry

h - Hot k - Cold

