

## UPSC Civil Services Examination

### UPSC Notes [GS-I]

#### Topic: Koeppen's Climate Classification - Group D Climates [Geography Notes for UPSC]

##### Koeppen's Group D Climates

In a major portion of the middle and high latitudes lie a group of climates classified within the Koeppen scheme as C and D.

- The average temperature is above 10 °C in their warmest months.
- The average temperature in the coldest month is below -3 °C.
- This climatic condition is generally found in the interiors of continents and on their upper east coasts, typically north of 40°N.
- Group D climates are very rare in the Southern Hemisphere, due to the smaller land masses in the middle latitudes and the almost complete absence of land at 40–60° south.
- It exists only in some highland locations.

##### Cold Snow Forest Climates (D)

- Cold snow forest climate is found in the large continental area in the northern hemisphere between 40°-70° North latitudes.
- The regions lying in this climate are:
  - Europe
  - Asia
  - North America
- Cold snow forest climates are divided into two types:
  - Df- cold climate with humid winter.
  - Dw- cold climate with dry winter.
- The severity of winter is more pronounced in higher latitudes.

##### Cold Climate with Humid Winters (Df)

- Cold climate with humid winters is found in the poleward of mid-latitude steppe and marine west coast climate.
- The winters are snowy and cold.
- The frost free season is short.
- The annual ranges of temperature are high.
- The weather changes are unexpected and short.

- Poleward, the winters are extreme.

### Cold Climate with Dry Winters (Dw)

- Cold climate with dry winter mainly found over North-Eastern Asia.
- Precipitation occurs in summer.
- The annual precipitation is low from 12-15 cm.
- The progress of pronounced winter anticyclone and its weakening in summer sets in monsoon-like reversal of the wind in this area.
- Poleward summer temperatures are poorer and winter temperatures are very low with several locations experiencing below freezing point temperatures.

