



**B.A./B.Sc. Geography(Hons.)Part-I
Paper-I -Physical Geography
Topic- Climatic Classification**

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CLIMATIC CLASSIFICATION

- Koeppen's Classification: German botanist and climatologist presented his classification in 1900 based on vegetation zones of French plant physiologist Candolle presented in 1874.
- It was modified by him in 1931, 1936 and later Geigger-Pohl modified it in 1953.
- Based on the five vegetation zones he divided the world climates into 5 principle types and designated them by capital letters A,B,C,D,E.



THE FIVE MAJOR CLIMATIC GROUPS

- A- Humid Tropical Climate
- B- Dry Climate
- C – Warm Temperate Climate
- D – Cold forest Climate
- E – Polar Climate



A – TROPICAL HUMID CLIMATE

- Humid tropical climate, characterized by winterless season.
- Warm and moist condition throughout the year and mean temperature always above 18° C.
- Second Letters (f, m, w)
- f – precipitation throughout the year, minimum precipitation of at least 6cm in (driest month) every month. Temperature of (coldest month) every month above 18° C .
- m – monsoon climate, short dry season, avg. precipitation in driest month less than 6 cm.
- w – dry in winter, wet in summer



B- DRY CLIMATE

- Evaporation exceeds precipitation throughout the year. Precipitation not sufficient to maintain proper water table of the ground. There is a net water deficit.
- Second letters (S, W); third letter (h, k)
- W – Arid or Dry desert Climate
- S- Semi Arid or Steppe Climate
- h- mean annual temperature greater than 18° C
- k – mean annual temperature below 18° C



C – WARM TEMPERATE CLIMATE

- Humid Meso-thermal or warm temperate rainy climate. Precipitation in all season. The average temperature of the coldest month lies between 18°C and -3°C .
- Second letters (s, w, f); third letters (a,b,c).
- s- dry season in summer
- f- constantly moist, driest month has at-least 3cm rainfall.
- w – dry in winter, wet in summer.
- a- warm summer, temperature of the warmest month above 22°C .
- b- cold winter, temperature of the warmest month below 22°C
- c- cold short summer season.



D- COLD FOREST CLIMATE

- Humid Micro thermal or Cold Snow forest Climate or Humid Cold Climate.
- Temperature of coldest month below -3°C but of the warmest month above 10°C . Ground surface covered with several month of a year.
- Second letters (s, w, f)
- s- dry season in summer
- w- dry in winter, wet in summer
- f – constantly moist. Driest month has at least 3 cm precipitation.



E- POLAR CLIMATE

- Warmest month less than 10° C.
- Second letters (T & F)
- T - warmest month below 10° C but above 0° C, tundra climate present in this area.
- F – Warmest month below 0° C. Permanent snow fields.



Koepfen's Climatic Classification

1 st Letter	2 nd Letter	3 rd Letter
A TROPICAL- Winterless season, warm and moist. Mean temperature always above 18°C	f- constant moisture, 6cm precipitation in the driest month	h- Mean annual temp. above 18°C k- Mean annual temp. below 18°C h- Mean annual temp. above 18°C k- Mean annual temp. below 18°C
	m- dry season in other wise excessive moist climate	
	w- dry in winter, wet in summer s- dry season in summer	
B DRY - Evaporation exceeds precipitation.	S- semi arid	a- warm month above 22°C b- warm month above 22°C, but with 4 months above 10°C c- warm month above 22°C, but with 1 to 3 months above 10°C
	W- arid	
C MESOTHERMAL- At least one month greater than 10°C, Coldest month between 18°C to 0°C	s- dry season in summer	a- warm month above 22°C b- warm month above 22°C, but with 4 months above 10°C c- warm month above 22°C, but with 1 to 3 months above 10°C
	w- dry in winter, wet in summer	
	f- constant moisture, 3cm precipitation in the driest month	
D MICROTHERMAL At least one month greater than 10°C, Coldest month less than 0°C	s- dry season in summer	a- warm month above 22°C b- warm month above 22°C, but with 4 months above 10°C c- warm month above 22°C, but with 1 to 3 months above 10°C
	w- dry in winter, wet in summer	
	f- constant moisture, 3cm precipitation in the driest month	
E POLAR - Warmest month less than 10°C	T- warm month between 10-0°C F- warm month below 0°C	a- warm month above 22°C b- warm month above 22°C, but with 4 months above 10°C c- warm month above 22°C, but with 1 to 3 months above 10°C
	Climate of great variability due to altitude and aspect variation.	
H - HIGHLAND		

The left side of the slide features a decorative vertical bar composed of several overlapping elements: a thin orange line, a wider bar with a fine grid pattern, a semi-transparent gradient bar, and another thin orange line. To the right of these bars are five solid orange circles of varying sizes, arranged in a cluster. The text "THANK YOU" is positioned to the right of the circles.

THANK YOU