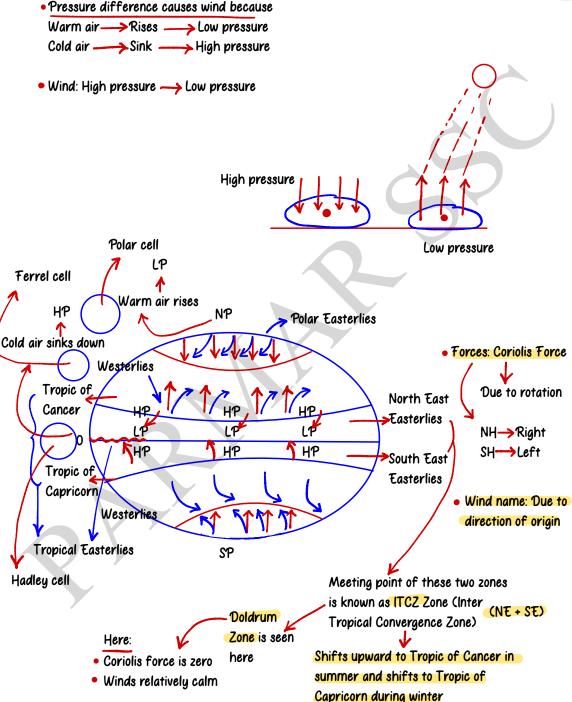


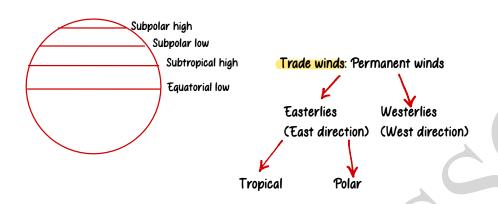
WINDS, CLIMATE, OCEAN CURRENTS

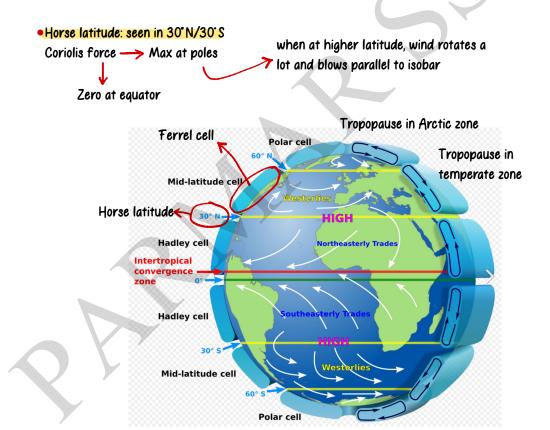






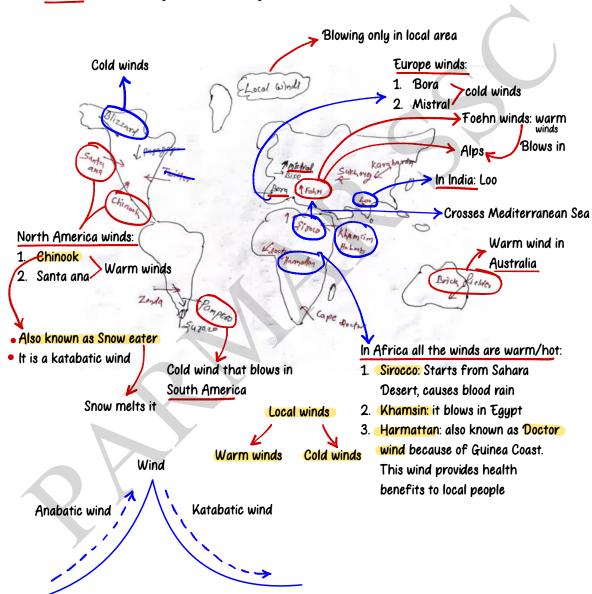






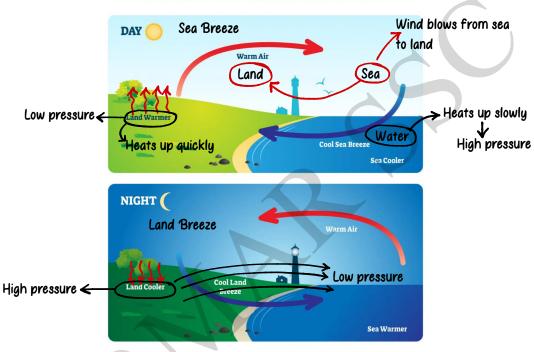


- Geostrophic winds: winds that blow parallel to isobars
- Isobars: line connecting the points having same pressure

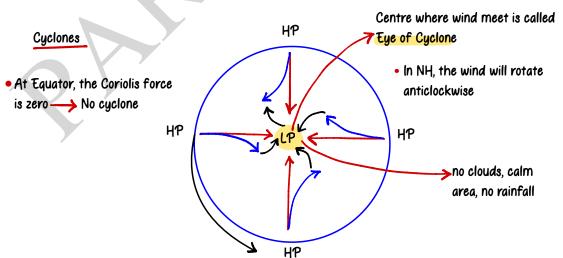




LAND VS SEA BREEZE



- Land: heats up and cools down quickly
- •Water: heats up and cool down slowly





Conditions favourable:

- 1. Large Sea Surface temperature
- 2. Coriolis force
- 3. Small variation in vertical wind speed
- 4. Pre-existing weak LP area
- During cyclone, Cumulonimbus clouds are formed→Causes heavy rain and thunderstorms

Cyclone at High Latitudes are caused due to Frontogenesis

Fronts

Two different air masses are formed/meet

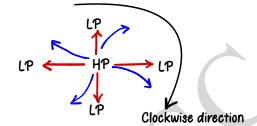
Causes Extratropical/Temperate Cyclone

• Difference in Tropical and Temperate cyclone

Tropical	Temperate
• Only in Sea	• In land/sea
More destructible	 Less destructible
 Not frequent 	More frequent
 Flows East to West 	 Flows from West to East



Anticyclone: forms around high pressure



Cyclone Anticlockwise

NH → Anticlockwise Clockwise

SH → Clockwise Anticlockwise

Different names of cyclones:

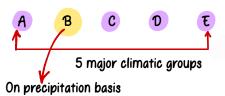
- 1. Atlantic Ocean: Hurricane
- 2. Australia: Willy-Willy
- 3. Western Pacific/South China Sea: Typhoon
- 4. Indian Ocean: Cyclone

Koeppen Climatic Classification

- •Weather: short term
- Climate: long term → Roughly 30 years data is taken

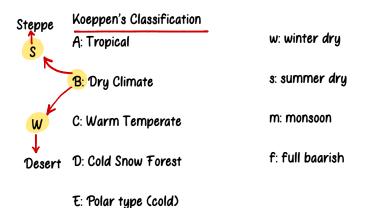
Koeppen in 1918 — Empirical Climatic Classification

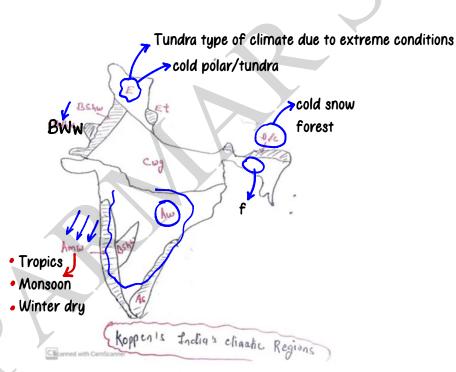
- Used capital and small letters
- Climatic groups represented with different codes



· Mediterranean Sea: Cs

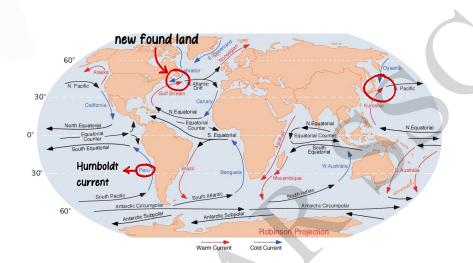








Ocean Currents

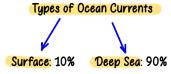




Reasons of origination:

- 1. Heating by Sun
- 2. Wind
- 3. Density different
- 4. Coriolis force
- 5. Coastline of continents

- Cold air: water holding capacity less
- Warm air: water holding capacity high





Effects:

1. Warm ocean current + cold ocean current → Best fishing zones

Creates foggy conditions: worst for Harbouring

2. Cold ocean current: creates desert

Max. desert seen on Western side of the continent



• Grasslands: areas where there is not much precipitation (Rainfall)



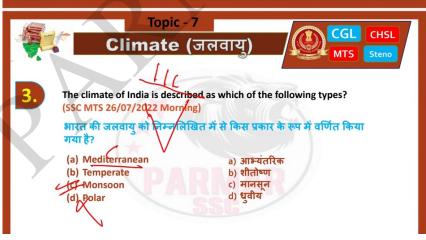
In early 1900's, which German Climatologist divided the world's climate into different category based on temperature, amount of rainfall and the time of year when rainfall occurs?

(SSC CHSL 07/06/2022 Afternoon)

1900 के दशक की शुरुआत में, किस जर्मन जलवायु विज्ञानी ने विश्व की जलवायु को तापमान, वर्षा की मात्रा और वर्ष के उस समय जब वर्षा होती है, के आधार पर विभिन्न श्रेणियों में विभाजित किया था?

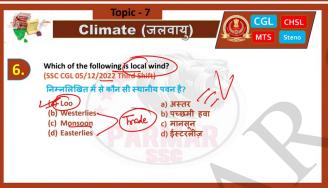
- (a) Michael Wille
- Wladimir Koppen
- (c) Rudolf Geiger
- (d) Alfred Wegener
- a) माइकल विले
- b) व्लादिमीर कोपेन
- c) रुडोल्फ गीगर
- d) अल्फ्रेड वेगेनर

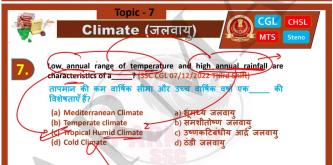


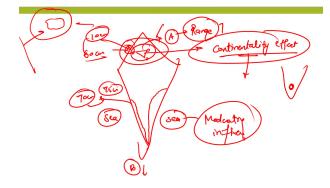






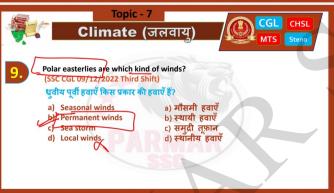


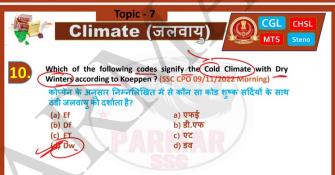


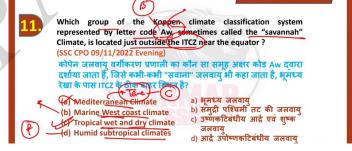




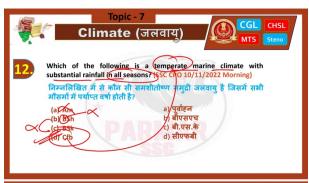






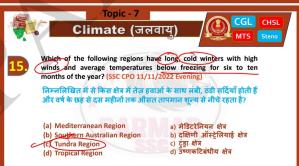




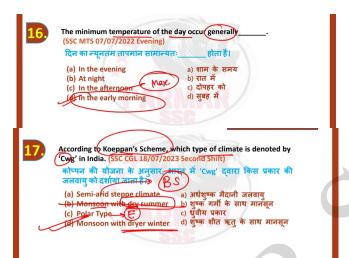


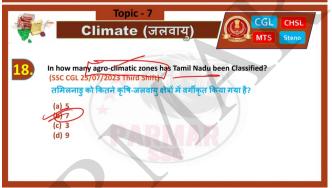


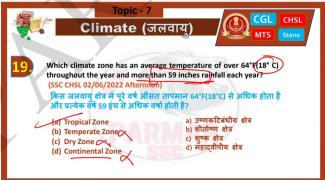






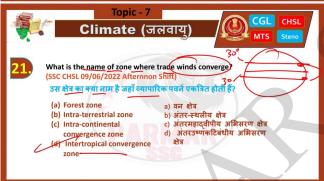


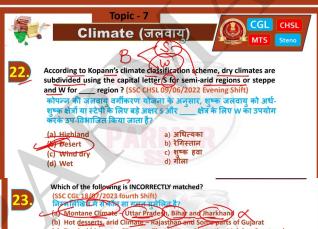






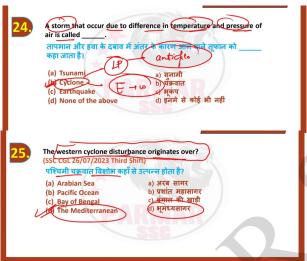
Which type of climate do the two island regions of India, Lakshadweep and Andaman and Nicobar Islands experience? (SSC CHSL 06/06/2022 Morning) भारत के दो दवीप क्षेत्र, लक्षदवीप और अंडमान और निकोबार दवीप समह किस प्रकार की जलवायु का अनुभव करते हैं? (a) Humid subtropical climate a) आर्द्र उपोष्णकटिबंधीय जलवाय (b) Housemi arid slimate b) गर्म-अर्धश्ष्क जलवाय् c) उष्णकटिबंधीय गर्म जैलवाय Tropical Warm Climate (d) Subtropical highland Climate d) उपोष्णकटिबंधीय उच्चभूमि जलवाय्

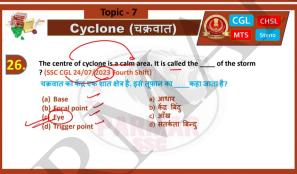


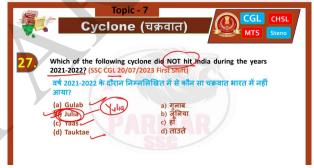


- (c) Tropical Monsoon Climate The Western Ghats, the Malabar Coast and Southern Assam
- (d) Tropical Semi-arid (Steppe) climate Karnataka, Central Maharashtra, some parts of Tamil Nadu and Andhra Pradesh
- a) पर्वतीय जलवायु उत्तर प्रदेश, बिहार और झारखंड b) गर्म मिठाइयाँ, शुष्क जलवायु राजस्थान और गुजरात के कुछ हिस्से c) उष्णकटिबंधीय मानसून जलवायु पश्चिमी घाट, मालाबार तट और दक्षिणी
- d) उष्णकटिबंधीय अर्ध-शुष्क (स्टेपी) जलवायु कर्नाटक, मध्य महाराष्ट्र, तमिलनाड और आंध्र प्रदेश के कछ हिस्से

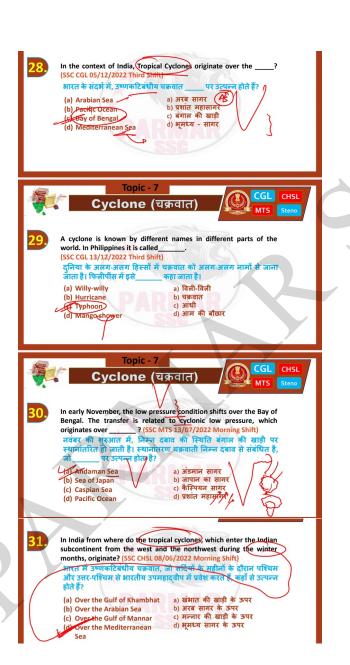


















34. Temperate cyclones are also termed as...... शीतोष्ण चक्रवातों को...... श्री कहा जाता है। अस्टिंप्रिय Tropical Cyclones a) अतिरिक्त उष्णकटिबंधीय चक्रवात (c) Wave Cyclones b) तरंग चक्रवात (c) Depressions c) गड्ठी (d) All of the above

