

## Map Class 03

9th May, 2024 at 9:00 AM

### INTRODUCTION (09:30 AM)

- A Brief Overview Of The Previous Class.

### ANTARCTICA (09:30 AM)

- Antarctica is estimated to be between 25-30 million years old and is covered by ice.
- It was formerly connected with Africa and later with South America.
- In 1820, Russia made the first landing on Antarctica. (Antartica is also known as the White continent and Africa is also known as Dark continent.)
- Initially, it was known as Terra Australis Incognita.
- Antarctica is considered the coldest place on Earth.
- Orca killer whales are among the top predators in its surrounding waters.
- The highest peak in Antarctica is the Vinson Massif.
- The Antarctic Treaty, signed in 1959 by 12 countries, established Antarctica as a zone of peace and scientific research.
- This treaty prohibits military activities, nuclear testing, and mineral mining while promoting scientific cooperation and environmental protection.
- The Antarctic Treaty System now comprises 54 member countries, including India.
- India adheres to the principles of the treaty and participates in scientific research expeditions.
- India has established research stations in Antarctica.

#### These are:

- **Dakshin Gangotri, Maitri, and Bharati.**
- The South Magnetic Pole is located near Dumont d'Urville, a French research station in Antarctica.

-> Dakshin Gangotri got abandoned in winter so we made Maitri with the help of Russia and we also made Bharati to beat China.

-> A/o to Antarctica Act passed in 2022 the jurisdiction of Indian courts was extended to Antarctica also.

-> Change in the position of magnetic poles is known as Polar Wandering.

-> The ice piece which got separated from main ice and roaming like that is known as Zombie ice.

## ARCTIC REGION: (10:00 AM)

- The Arctic region is characterized by its vast expanses of ice and water, with no landmass beyond the Arctic Circle.

### Arctic Council:

- The Arctic Council is a significant intergovernmental forum established in 1996 to facilitate cooperation among Arctic states and indigenous communities.

**Membership:** The Arctic Council consists of eight Arctic states, namely:

- Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden, and the United States.
- Additionally, it includes six indigenous organizations representing the Arctic indigenous peoples.

### Objectives:

- The Arctic Council focuses on addressing issues related to sustainable development and environmental protection in the Arctic region.
- These issues encompass climate change, biodiversity conservation, and pollution prevention.
- The Council aims to promote cooperation and coordination among member states and indigenous communities.
- Notable Initiatives: Norway's Svalbard Global Seed Vault serves as a vital facility for preserving plant genetic resources.
- India also maintains a research station named **Himadri** in the Arctic region, contributing to scientific research and collaboration.
- Moreover, India has established the **INDArc**, an underwater observatory, to study various aspects of the Arctic environment and its impact on global climate patterns.

## COUNTRIES PASSING THROUGH IMPORTANT LINES (10:20 AM) (See on last page)

### Equator

Brazil  
Colombia  
Democratic Republic of the Congo  
Ecuador  
Gabon  
Indonesia  
Kenya  
Somalia  
Uganda

### Tropic of Cancer

Mexico  
Bahamas  
Western Sahara  
Mauritania  
Mali  
Algeria  
Niger  
Libya  
Egypt  
Saudi Arabia

### Tropic of Capricorn

Brazil  
Paraguay  
Argentina  
Chile  
Namibia  
Botswana  
South Africa  
Mozambique  
Australia

- **Prime Meridian** and Equator: Meet at the Gulf of Guinea.
- Prime Meridian and Tropic of Cancer: Intersect in Algeria.
- Prime Meridian and Tropic of Capricorn: The intersection point is in the South Atlantic Ocean.

**The Greenwich meridian passes through eight countries in Europe and Africa from north to south:**

- United Kingdom (specifically, only England)
- France.
- Spain.
- Algeria.
- Mali.
- Burkina Faso.
- Togo.
- Ghana.

-> Antipodal means exactly opposite points on a Sphere.

-> Geographical north and south poles are antipodal to each other.

**MOUNTAINS OF THE WORLD (10:32 AM)****Precambrian Mountains (560 mya):**

- Location: Laurentian Plateau. (in North America, these were mts earlier but now they are Plateau.)
- Type: Old fold mountains.

**Caledonian Mountains (400 mn years ago):**

- Locations:
- Appalachian Mountains (eastern coast of USA): Rich in iron and coal. (we find steel industries here)
- Scandinavian Mountains.
- Scottish Mountains.
- Greenland Mountains.
- Aravalli Mountains (India).
- Type: Old fold mountains.

**Hercynian Mountains (250 - 300 mya):**

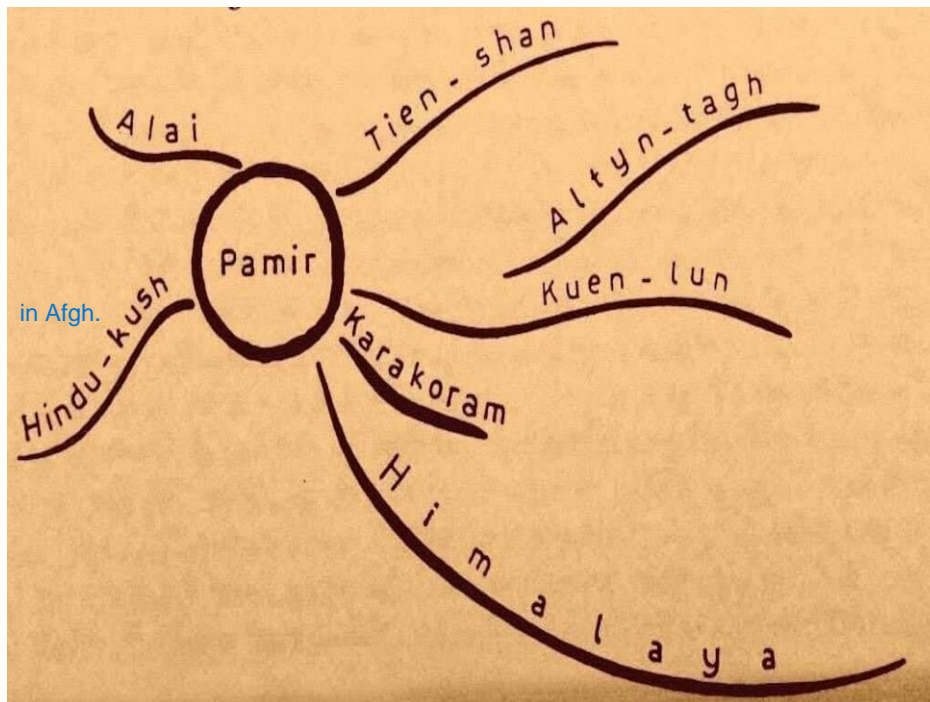
- Locations:
- Black Forest and Vosges. (Block Mts in Europe) (Rhine river flows in rift valley bw these )
- Ural Mountains.
- Iberian Peninsula. (Spain and Portugal they are considered as Block mts)
- Tien Shan (China).
- Altai Mountains. ] (Both are in China and are Block mts)
- Vindhya and Satpura Ranges (India).
- Great Dividing Range: Mt. Kosciuszko (Australia). -> Australian Alps
- Type: Fold Mountains.

**Alpine Mountains (50 - 20 mya):**

- Also known as the Tertiary Mountains. (Tertiary period starts from the end of Dinosaurs)
- Formation: Along plate boundaries.
- Locations:
- Asia: K2, Great Himalayas, Kunlun Shan.. , Arakan Yoma, Pegu Yoma in Myanmar

**Pamir Knot:**

-> Knot means where multiple mountain ranges meet.



Khyber pass is in Hindu Kush.  
Bolan Pass in Baluchistan.

Armenian Knot:



Elburz is the highest point of Europe located on Caucasus.

## EUROPE (10:30 PM) (Tertiary or Alpine mts)

### Alps Mountains (Switzerland is present on this)

- Matterhorn Peak (Switzerland-Italy border)
- Mont Blanc (Highest point of Alps)
- Jura Mountains (Jurassic period is named after this mountain)
- Apennines (Italy)

### Oceania: (Tertiary or Alpine mts)

- Southern Alps (New Zealand)
- Mount Cook or Mount Aoraki (Highest point of New Zealand)

## **Africa:**

- Atlas Mountains (fold mts)
- Kilimanjaro Mountains (in Tanzania)
- Mount Kenya (second highest peak in Africa located at Equator)

## **North America:**

- Rocky Mountains -> Cascade mts -> Coast mts.
- Sierra Nevada (South part of Rocky Mountains) (this further extends in Southern part and named Sierra Madre)  
Cascade
- Coast Mountains
- Cascade Mountains
- Mount McKinley: The highest point in the Alaska Range

## **Plains:**

- Canadian Shield
- Great Plains: Drained by the Mississippi River
- Prairies (Grain Bowl)

## **Plateaus:**

- Columbia Plateau (in USA)
- Colorado Plateau
- Death Valley: Lowest point of North America with high diurnal temperature

## **South America:**

- Andes Mountains: Longest mountain range on Earth's surface.
- Also, second tallest mountain.
- Mount Aconcagua, Argentina

## **Plateaus:**

- Guyana Highlands -> Labrador plateau is at upper of Laurentian plateau.
- Brazilian Highlands -> Labrador is also known for iron deposits.
- Altiplano Plateau

## **Plains:**

- Selvas (Amazon Rain Basin)
- Llanos: Tropical grassland (Tropical grassland of Africa is known as Savanna or Sudan climate.)
- Mato Grosso: Tropical grassland
- Gran Chaco: Tropical grassland (These are on the south of equator)
- Pampas: Temperate grassland
- Pantanal: Wetland grassland.

## AFRICA (10:40 AM)

- **Table Plateau:**
- Original part of Pangaea.
- **Katanga Plateau:**
- Located in the Democratic Republic of Congo.
- **Drakensberg:**
- Mountain range in South Africa.
- **Darfur:** (It is disputed)
- A region in western Sudan.
- **Sudan Savanna Grassland:** Located in Sudan.
- **Sahel Region:** Characterized by semi-arid grasslands.
- **Sahara Desert:** Vast desert region

## Plateaus

- **Asia:**
- **West Asia:**
- Anatolia Plateau in Turkey.
- **South Asia:**
- **Tibetan Plateau** -> Loes plateau is in China near to Mongolia border.
- **Potwar Plateau** -> Loes means a very fine desert sand and this plateau is filled with this sand.
- **Australia:** -> This sand gets deposited into a river and make its color yellow that is why this river is also known as Yellow river and finally it comes in Yellow sea.
- Kimberley Plateau.
- Uluru (Monolith rock, the world's largest monolith sandstone)

## DESERTS OF THE WORLD (12:10 PM)

### North America:

- **Sonoran Desert:** Located in the southwestern United States and northwest Mexico, known for its biodiversity.
- **Mojave Desert:** Situated primarily in southeastern California and southern Nevada, famous for landmarks like Death Valley.
- **Great Basin Desert:** Encompassing much of Nevada and parts of Utah, Oregon, Idaho, and California, characterized by its arid climate and unique ecosystems.

### South America:

- **Atacama Desert:** Located in Chile, known as one of the **driest places** on Earth.
- **Patagonian Desert:** Extending across parts of Argentina and Chile, marked by its cold and windy conditions.
- **Brazilian Highlands:** While not a desert in the traditional sense, it experiences semi-arid conditions in some areas.

### Africa:

- **Sahara Desert:**
  - The largest hot desert in the world, spanning several North African countries.
- **Kalahari Desert:**
  - Stretching across Botswana, Namibia, and parts of South Africa, characterized by its sandy plains and grasslands.
- **Namib Desert**
- Libyan Desert
- Nubian Desert
- Danakil Desert
- Chalbi Desert
- Karoo Desert

-> Sandy desert of Sahara is called Erg.

-> Rocky desert of Sahara is called Hamada.

-> Rub Al Khali means the empty quarters. It is a desert found in Saudi Arabia.  
Here no human lives.

### Asia:

- Arabian Desert (Saudi Arabia, Oman, Yemen, United Arab Emirates, Iraq, Jordan)
- Gobi Desert (Mongolia, China)
- Thar Desert (India, Pakistan)
- Kyzylkum Desert (Uzbekistan, Kazakhstan)
- Karakum Desert (Turkmenistan)
- Dasht-e Kavir (Great Salt Desert) (Iran)
- Dasht-e Lut (Lut Desert) (Iran)
- Syrian Desert (Syria, Jordan, Iraq)
- Dasht-e Margo (Desert of Death) (Iran)
- Rub' al Khali (Empty Quarter) (Saudi Arabia, Oman, UAE, Yemen)
- Taklamakan Desert (China).

### Australia:

- Great Victoria Desert
- Great Sandy Desert
- Tanami Desert
- Simpson Desert
- Gibson Desert
- Little Sandy Desert

**(TOPIC FOR THE NEXT CLASS: CONTINUATION OF PHYSICAL FEATURES AND ECONOMIC ASPECTS OF THE WORLD GEOGRAPHY)**

TUM SAB France Gaye

Togo, UK, Mali, Spain, Algeria, Burkina Faso, France, Ghana - - -> Prime Meridian

-> ToCancer and Prime Meridian meets at Algeria and rest two are in ocean.

	NA or SA	Africa	Asia or Oceania	
Tropic of Cancer	Uncle Max	LAME WoMan	MOB IS CUTe	
Equator	except Ek CoBra	Golden DUCKS	MI ke pass	MI means Mumbai Indians. in real Maldives and Indonesia
Tropic of Capricorn	CAB P	NB Se MuMbai	Aya	

USA(Hawaii island), Mexico, Libya, Algeria, Mali, Egypt, Western Sahara, Mauritania, Myanmar, Oman, Bangladesh, India, Saudi Arabia, China, UAE, Taiwan - - -> ToCancer  
Ecuador, Colombia, Brazil, Gabon, Democratic Republic of Congo, Uganda, Congo, Kenya, Somalia, Maldives, Indonesia - - -> Equator  
Chile, Argentina, Brazil, Paraguay, Namibia, Botswana, South Africa, Mozambique, Madagascar, Australia - - -> ToCapricorn