

Tender Heart High School

Sector 33B, Chandigarh

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Name: Varun Sathotia

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Class: VII

## Antarctica

### (1) Discovery of Antarctica:

- In early western theories Antarctica was known as Sextant Australis.
- It was believed that it existed in far south of Globe.
- The term Antarctica means opposite of Arctic Circle.
- It was coined by Martinus of Tyre in 2nd century AD.
- In 1773, James Cook crossed the latitude of  $67^{\circ}15'$ s along the Antarctic Circle for first time and discovered some islands but not the mainland of Antarctica.
- In 1800's many expedition was done in Antarctica.
- The Russian Expedition was led by Fabian Gottlieb von Bellingshausen and Mikhail Lazarev.
- The first Norwegian expedition to Antarctica was led by captain Carl Anton Lassen in 1892.
- Captain Carl Anton Lassen discovered fossils in Antarctica and Lassen Iceshelf was named after him.
- Once North Pole was reached in 1909, so in 1911 Roald Amundsen successfully reached South Pole.
- The South Pole Station Amundsen Scott South Pole Station was named after Roald Amundsen and Robert Falcon Scott.

### (2) The Antarctic Treaty

- This Treaty was signed in the year 1959.
- Initially it was signed by 12 nations.
- Later on many countries joined this treaty.

## Features of Antarctic Treaty

- It prohibits military activities.
- It prohibits mining.
- It prohibits nuclear explosion and nuclear waste disposal.
- It promotes scientific research and protects continent's ecozone.

\* There is no time zone in Antarctica.

The research station situated in Antarctica follows the time zone of their own country.

France is the only country that claims its time zone in Antarctica.

## (3) Antarctica as a continent

### (A) Location and Extent:

- It is the world's southernmost continent and contains South Pole.
- It is situated in the Antarctic Region of Southern Hemisphere.
- It is entirely surrounded by Southern Ocean.
- It is a permafrost region.
- It is the 5th largest continent in terms of area covered.
- About 98% of Antarctica is covered by ice with average thickness of about 1.6 km.
- Antarctica is a coldest, driest and windiest continent and has highest elevation of 2000 metres above sea level.
- It is considered a desert with annual precipitation of 200 mm along the coast.
- The temperature in Antarctica reaches upto  $-89^{\circ}\text{C}$ .
- There is no permanent human settlement in Antarctica. But people do reside at research stations throughout the year.
- Antarctica stores 90% of world's total ice and 70% of its fresh water.

### (B) Boundaries:

- Antarctica is surrounded by Pacific, Atlantic and Indian Ocean.
- The Weddell Sea and Ross Sea penetrates Antarctica from opposite direction.
- The eastern part of Antarctica is large, while the western part is narrow with peninsula and some islands.

### (c) Physical Features:

- Antarctica has no coastal plains.
- The Transantarctic mountains divides the continent into two parts.
- The smaller and narrower western part is known as Lesser Antarctica.
- The larger eastern part is known as Greater Antarctica.
- The highest mountain peak is Vinson Massif.
- The highest point of Antarctica is Kirkpatrick with 4528 metres.
- The second highest active volcano on Ross Island is Mount Erebus.
- Mt. Sidley is the highest volcano on Antarctica.
- Queen Maud Land plateau is located along eastern coast of Antarctica.
- South Pole lies on South Pole Plateau at height of 2785 metres above sea level.
- The largest lake of Antarctica is Lake Vostok.