

GEOGRAPHY QUESTIONS

CHAPTER-2

A. Define the following terms:

1. Equator: It is an imaginary line drawn midway between the North and South Poles. It divides the Earth into two equal parts, the North Hemisphere and the South Hemisphere.
2. Earth's grid: The network of parallels or latitudes and meridians or longitudes that divide the Earth's surface into a grid-like pattern is called the Earth's grid or geographic grid.
3. Heat zones: The Earth is divided into three heat zones based on the amount of heat each part receives from the Sun. These three heat zones are the Torrid Zone, the Temperate Zone and the Frigid Zone.
4. Great circle: The Equator is known as the great circle, as it is the largest circle that can be drawn on the globe. This is because the equatorial diameter of the Earth is the largest.
5. Prime Meridian: It is the longitude that passes through Greenwich, a place near London in the UK. It is treated as the reference point. Places to the east and west of the Prime Meridian are measured in degrees.
6. Time zones: A time zone is a narrow belt of the Earth's surface, which has an east-west extent of 15 degrees of longitude. The world has been divided into 24 standard time zones.

B. Answer the following Questions:

1. What is the true shape of the Earth?

The Earth looks spherical in shape, but it is slightly flattened at the North and South Poles and bulges at the equator due to the outward force caused by the rotation of the Earth. This shape of the Earth is described as a 'geoid' meaning 'an Earth-like shape'

2. What is a globe?

Globe is a true model or miniature form of the Earth. It is used to study the earth as a whole. It shows continents, countries and oceans.

3. What is the latitudinal value of the Tropic of Cancer?

The Tropic of Cancer lies 23.5° North of the Equator.

4. What are the three heat zones of the Earth?

Following are the three heat zones of the Earth:

- i. the Torrid Zone,
- ii. the Temperate Zone
- iii. the Frigid Zone.

5. What are the parallels of latitude and meridians of longitudes?

All parallel circles from the Equator to the Poles are called parallels of latitudes. Latitudes are measured in degrees. The lines of references running from the North Pole to the South Pole are called meridians of longitudes. Longitudes are also measured in degrees.

6. Why does the Torrid Zone receive the maximum amount of heat?

- I. The area between the Tropic of Cancer and the Tropic of Capricorn is known as the Torrid Zone.
- II. The mid-day Sun is exactly overhead at least once a year on all these latitudes. Hence, this area receives the maximum amount of heat.

7. Why is it 5.30 P.M. in India and 12.00 noon in London?

In London, the Greenwich Mean Time (GMT) is followed. The Indian Standard Meridian is located 82.5° East of the Prime Meridian (i.e. 0 degrees). Thus the Indian Standard Time (IST) is 5 hours and 30 minutes ahead of GMT. So, when it is 12 noon in London, it is 5.30 in India.

8. What are the main characteristics of the parallels?

Following are the main characteristics of parallels:

- 1. All parallels are perfect circles except the North and South Poles.
- 2. The Equator is the largest parallel.
- 3. The lengths of the parallels decrease, as they move away from the Equator.
- 4. All parallels are equidistant from each other.
- 5. The distance between any two parallels at an interval of 1 degree is 111 kilometres.

9. What are the main characteristics of the meridians?

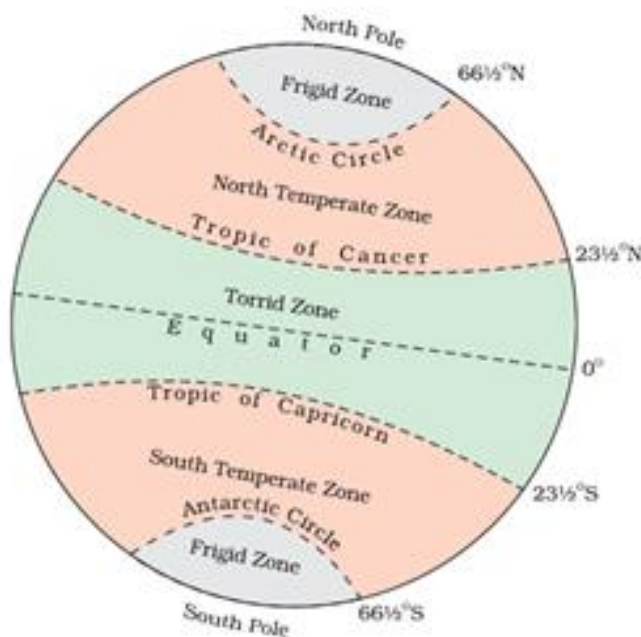
Following are the main characteristics of meridians:

- 1. The lengths of all meridians are the same, as all of them are semicircles which connect the two poles.
- 2. Any two opposite meridians when taken together form a complete circle.
- 3. The maximum distance between any two meridians is at the Equator.
- 4. The distance between any two meridians decreases as one moves away from the Equator as all the meridians meet at the poles.

10. Explain the different types of heat zones of the Earth with the help of diagram.

Based on the heat received from the Sun, the Earth is divided into three heat zones. They are:

- I. **Torrid zone:** It is a region between the Tropic of Cancer and the Tropic of Capricorn. This region receives the direct vertical rays of the Sun for almost the whole year. Therefore, this zone gets the maximum heat from the Sun. This zone is known as the torrid or the tropical zone.
- II. **Temperate Zone:** This zone lies between the Tropic of Cancer and the Arctic Circle in the Northern Hemisphere and between the Tropic of Capricorn and the Antarctic Circle in the southern hemisphere. This zone gets the slanting rays of the Sun as the angle of the Sun's rays goes on decreasing towards the Poles. Thus this zone experiences moderate temperature.
- III. **Frigid Zone:** The frigid zone lies between the Arctic Circle and the North Pole and between the Antarctic Circle and the South Pole. This zone is also known as the Polar region. Since it receives the extreme slanting rays of the Sun, the temperature is extremely low throughout the year. This is the reason why the polar regions are generally covered with ice.



11. Describe the important parallels of latitude with the help of diagram.

Important Parallels of Latitudes: Apart from the equator (0°) and the Poles (90°); there are four important parallels of latitudes. They are as follows:

The Arctic Circle

The Arctic Circle is located at approximately 66.5 degrees north latitude, or 66.5 degrees north of the equator. The Arctic Circle marks the beginning area where the sun will not rise during winter solstice and will not set during summer solstice.

The Antarctic Circle

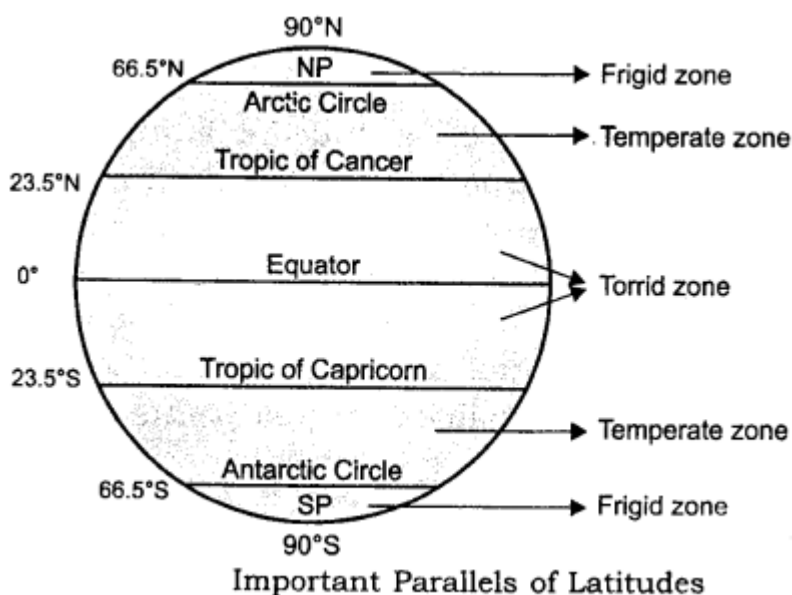
The Antarctic Circle is located at approximately 66.5 degrees south latitude, or 66.5 degrees south of the equator. This line, or circle, of latitude marks the start of the southern area known as the Antarctic.

The Tropic of Cancer

The Tropic of Cancer is located at approximately 23.5 degrees north latitude, or 23.5 degrees north of the Equator. During the summer solstice the sun is located immediately above the Tropic of Cancer.

The Tropic of Capricorn

The Tropic of Capricorn is located at approximately 23.5 degrees south latitude, or 23.5 degrees south of the equator. During the summer solstice of the Southern Hemisphere, the sun is located immediately above the Tropic of Capricorn.



12. On the physical map of the world, marks the oceans of the world.

