

 **SOCIAL STUDIES**

**GEOGRAPHY**

**GRADE: VI DATE: 21.7.20**

**2. LATITUDES AND LONGITUDES.**

**I.DISTINGUISH BETWEEN THE FOLLOWING**

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| **Parallels** | **Meridians** |
| These are the circles between the North and South Poles; they help in locating places in the north and south directions. | These are the lines joining the North and South Poles; they help in locating places in the east and west directions. |
| There are 181 parallels. | There are 360 meridians. |

2.

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| **Latitudes** | **Longitudes** |
| These are the circles between the North and South Poles; they help in locating places in the north and south directions. | These are the lines joining the North and South Poles; they help in locating places in the east and west directions. |
| These are also known as parallels. | These are also known as meridians. |

3.

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| **Local time** | **Standard Time** |
| It is the time of a place determined according to the longitude of that place. | It is the time of a place located on the standard meridian of a country. |

4.

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| **Torrid Zone** | **Frigid Zone** |
| It is located between the Tropic of Cancer and the Tropic of Capricorn. | It is located to the north of the Arctic Circle and the south of the Antarctic Circle. |
| The zone receives maximum amount of heat from the Sun. | The zone receives minimum amount of heat from the Sun. |

**II.EXPLAIN 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.

**III.**ANSWER THE FOLLOWING

1. 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.

**2.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 is decreases as one moves away the Equator as all the meridians meet at the poles.

**3. What is the purpose of having time zones?**

Countries like Russia, Canada and USA have a large ​east‒west stretch. We know that as the time at any place depends on the longitude of that place, a large longitudinal extent thus can lead to non-uniformity in time within different places in the same country. Thus, to avoid this, in 1884, the world was divided into 24 standard time zones to ensure uniformity and predictability in the time zones.

**HOTS**

1**. Why is the standard time of Bangladesh half an hour ahead of India?**

In 1884, the world was divided into 24 standard time zones. Now, each belt is a narrow belt running from north to south, with an east-west extent of 15 degrees. A meridian passing through the centre of each time zone has been selected to give the standard time of that zone. The standard time of Bangladesh is ahead of India by half an hour, as its standard meridian is 7.5° to the east of India’s standard meridian.

**2. Why is standard time needed for every country?**

The local time of the standard meridian is taken as the local time for the whole country. This concept of standard time for the whole country is needed because time varies with change in longitudes. If all places on different meridians follow their own local time, there would be confusion and chaos.

**3. How does the time of a place depend on its longitude?**

 There is a direct relationship between the longitude of a place and its time. As the Earth rotates, every meridian on the Earth faces the Sun once. This is the time when the Sun reaches the highest point in the sky. As the Earth rotates from west to east, the places that are situated to the east of the Prime Meridian have sunrise earlier than those situated to its west.