ജി എച്ച് എസ് എസ് പേരശ്ശന്നൂർ .2021-22

ഫസ്റ്റ്ബെൽ സഹായക പഠനസാമഗ്രി

സാമൂഹ്യശാസ്ത്രം 10

STUDY NOTES 10SS2 UNIT 1

1 .Causes of seasonal changes.

- **Apparent movement of the sun**
- **Revolution**
- **Parallelism of earth**
- **The tilt of the earth axis**

2. Parallelism of earth

- **Earth is tilted at an angle of 661⁄2° from the orbital plane.**
- **Earth is tilted at an angle of 231⁄2° from the vertical plane.**
- **The Earth maintains this tilt throughout its revolution**

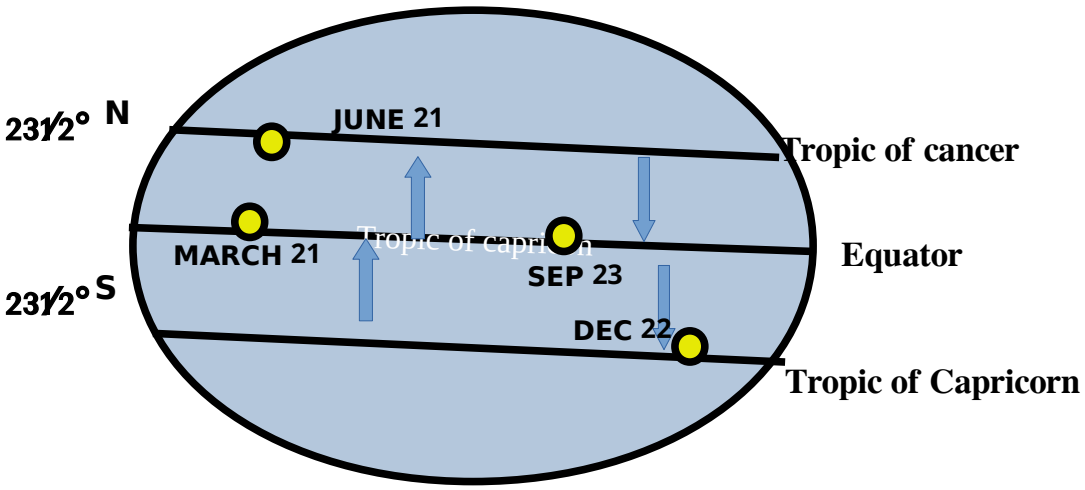
3Apparent movement of the sun

The position of the Sun in relation to the Earth varies apparently between Tropic of Cancer (231⁄2° North) and Tropic of Capricorn (231⁄2° South). This is known as the apparent movement of the Sun.

4.Equinoxes.

Summer Solstice

Winter Solstice



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Equinoxes.	Summer Solstice	Winter Solstice
◆ Sun is vertically over the Equator. ◆ March 21 ◆ September 23 ◆ Equal amount of sunlight is received in the Northern Hemisphere as well as in the Southern Hemisphere. ◆ Day and night will be equal	◆ June21 ◆ Sun is vertically over the tropic of cancer ◆ Northern Hemisphere experiences its longest day and shortest night.	◆ December22 ◆ Sun is vertically over the tropic of Capricorn ◆ Northern Hemisphere experiences its shortest day and longest night.

5 Seasons and their features

Spring	◆ Transition period from winter towards summer. ◆ March21 to June21 . Northern Hemisphere generally experiences spring ◆ Movement of the sun from the Equator to Tropic of Cancer ◆ Autumn in southern hemisphere ◆ plants sprouting, blooming and bearing buds
Summer	◆ Movement of the sun from the Tropic of Cancer to the Equator. June 21 to September 23.Northern Hemisphere generally experiences Summer. ◆ Winter in southern hemisphere ◆ Movement of the sun from the Tropic of Cancer to the Equator ◆ Drought ◆ Water scarcity ◆ Atmospheric temperature rises
Autumn	◆ Transition period from Summer towards Winter. ◆ September 23 to December22 . Northern Hemisphere generally experiences Autumn. ◆ Spring in southern hemisphere ◆ Movement of the sun from the Equator to the Tropic of Capricorn . ◆ Atmospheric temperature decreases. ◆ Shortening of day and lengthening of night ◆ Trees shed their leaves.
Winter	◆ December22 to March21 . Northern Hemisphere generally experiences Winter ◆ Summer in southern hemisphere . ◆ Movement of the sun from the Tropic of Capricorn to the Equator.Snow

Months	The apparent movement of the sun	Seasons	
		Northern hemisphere	Southern hemisphere
From March 21 to June 21	From the Equator to Tropic of Cancer	Spring	Autumn
From June 21 to September 23	From Tropic of Cancer to the Equator	Summer	Winter
From September 23 to December 22	From the Equator to Tropic of Capricorn	Autumn	Spring
From December 22 to March 21	From Tropic of Capricorn to the Equator	Winter	Summer

6.Utharayanam and Dakshinayanam

Utharayanam

Northward apparent movement of the Sun from Tropic of Capricorn (231⁄2°S) to Tropic of Cancer (231⁄2°N).
The duration of day in the northern hemisphere gradually increases

Dakshinayanam

southward apparent movement of the Sun from Tropic of Cancer(231⁄2°N) to Tropic of Capricorn (231⁄2°S)
June 21 ---December22

7.Local time.

The time estimated at each place, based on the apex position of the Sun,
When the Sun is vertically overhead, it is noon. 12.

8.Facts associated with rotation.

The Earth rotates from west to east.
The Sun rises in the east.
It takes 24 hours to complete one rotation.

9.Greenwich Meridian and Greenwich time

The zero degree longitude is known as the Greenwich Meridian.
Time is calculated worldwide based on the Greenwich Line.
Prime meridian.
The local time at the prime meridian is known as the Greenwich Mean Time.
24 Time zones/

10,Standard time

The longitude that passes almost through its middle as the standard meridian,
The local time at the standard meridian is the standard time .

11.Indian Standard time

The longitudinal extent of India is from 68°E to 97°E.
standard meridian of India---82½°E.
The local time along the standard meridian of India is generally considered as the Standard Time of India.

12.International Date Line

- **180° longitude.**
- **Doesn't pass through the corresponding land areas.**
- **It passes through Bering - strait in Pacific Ocean and avoid some of the inhabited islands.**
- **The travellers who cross this line from the West calculate the time by advancing it by one day and those who cross the line from the west deduct one day.**

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The longitudinal difference between India and Greenwich = 82°30 .
The time difference for 15° longitude = 1 hour.
The time difference for 82°30 longitude = 5½ hours= 5 hours 30 minutes
India is located to the east of Greenwich.
The time in India will be 5 hours and 30 minutes ahead of Greenwich Mean Time.

LAILA N NADUTHODIYIL
GHSS PERASSANNUR

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