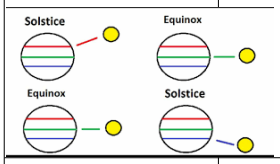
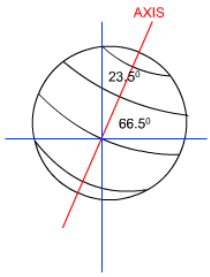
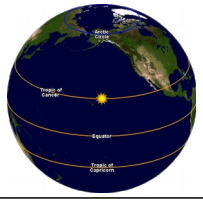
Date	Day	Peculiarity	Position of the sun	Northern hemisphere	Southern hemisphere
March 21	Equinox	Length of day and night will be equal	Above the Equator (0°)	From March 21 to June 21 Spring	Seasons Autumn
June 21 	Summer Solstice	Northern Hemisphere experiences its longest day and shortest night	Above the Tropic of Cancer (23½°N)	From June 21 to September 23 Summer	Winter
September 23	Equinox	Length of day and night will be equal	Above the Equator (0°)	From September 23 to December 22 Autumn	Spring
December 22 U C V	Winter Solstice	Northern Hemisphere experiences its shortest day and longest night.	Above Tropic of Capricorn (23½°S)	From December 22 to March 21 Winter	Summer

Utharayanam	Dakshinayanam
The Sun sets its northward apparent movement	The Sun sets its southward apparent movement
from Tropic of Capricorn (23½°S) and it culminates on Tropic of Cancer (23½°N)	from Tropic of Cancer (23½°N) and it culminates on Tropic of Capricorn (23½°S)
Following the winter solstice to June 21.	Following the summer solstice to December 22

Causes	
Earth's revolution 	It is in an elliptical orbit that the Earth revolves around the Sun
Tilt of the axis (the inclination of axis)	The axis of the Earth is tilted at an angle of 66½° from the orbital plane. If measured from the vertical plane this would be 23½°
Parallelism of the Earth's axis.	The Earth maintains this tilt throughout its revolution.
The apparent movement of the Sun. 	Since the parallelism is maintained same throughout the revolution, the position of the Sun in relation to the Earth varies apparently between Tropic of Cancer (23½° North) and Tropic of Capricorn (23½° South).

The facts associated with rotation.

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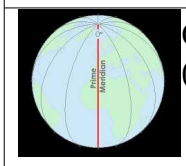
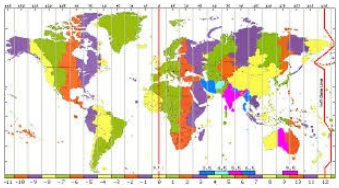
The Earth rotates from west to east U C Vahid	
It takes 24 hours to complete one rotation	
As the Earth rotates from west to east, the Sun rises in the east.	
The time required to complete a 360° rotation is 24 hours.	
On converting 24 hours into minutes 24 X 60 = 1440 minutes	
That is, the time required for the completion of one rotation = 1440 minutes	
The time required for the Earth to complete the rotation of 1° longitude is 1440/360 = 4 minutes.	
The time required for the rotation of 15° longitudinal area is 15 X 4 = 60 minutes (1 hour).	
15° longitudinal area of the Earth passes by the Sun within a period of one hour.	
The time required for the rotation of 7½° longitudinal area is 7.5 X 4 = 30 minutes (½ hour).	
82.5 degree X 4 = 330 minutes (5 ½ hour)	
Local time	When the Sun is vertically overhead, it is noon. Thus the time estimated at each place, based on the position of the Sun, is termed as the local time.
 Greenwich time (GMT)	The zero degree longitude is known as the Greenwich Meridian Time is calculated worldwide based on the Greenwich Line. The local time at the prime meridian is known as the Greenwich Mean Time.
Standard time 	Each country in the world considers the longitude that passes almost through its middle as the standard meridian. The countries with large longitudinal extent estimates more than one local time by considering more than one standard meridian. The local time at the standard meridian is the standard time of that country.
International Date Line 	180° longitude. 180° longitude to the east and west of Greenwich. To avoid 24 hours difference adjustments have been made avoiding the land areas along the 180° longitude. It passes only through ocean (the Bering Strait in the Pacific Ocean.).The line is fluctuated. Travellers gain or loss a day on crossing this line. There ends a day and begins another day.
Indian Standard Time (IST) 	The 82½°E longitude which passes almost through the middle of these longitudes has been fixed as the standard meridian of India. The local time along this longitude is generally considered as the Standard Time of India. This is known as the Indian Standard Time. The difference between the Indian Standard Time and the Greenwich Mean Time is 5½ hours. (5 hours 30 minutes)

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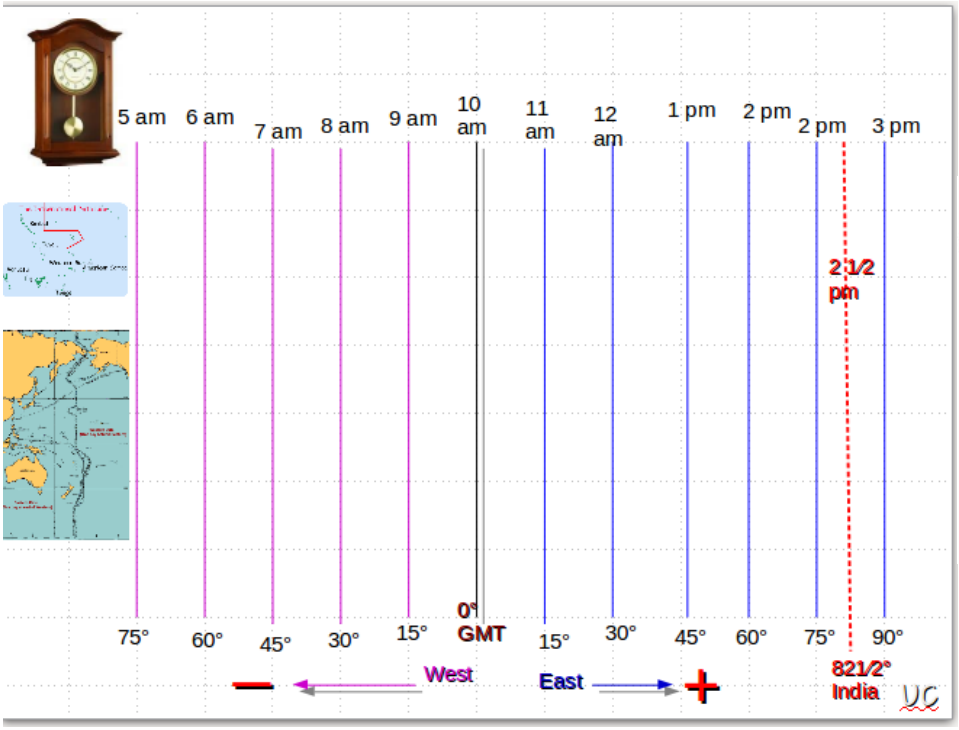
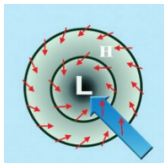
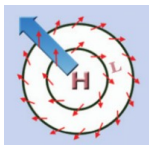
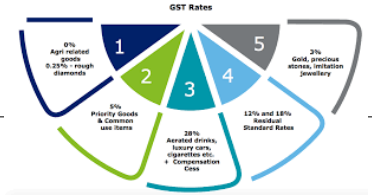
We should increase the time by 4 minutes towards east and decrease it by 4 minute towards west for every one degree longitude (7.5° X 4 = 30 minutes / 15° X 4 = 60 minutes (1 hour)



	Cyclone 	Anti cyclone 
Formation	Cyclones are caused by the formation of low atmospheric pressure at the centre surrounded by high pressure regions.	Anti Cyclones are caused by the formation of high atmospheric pressure at the centre surrounded by low pressure regions.
Northern hemisphere	Due to Coriolis effect winds flow in the anti-clock wise direction	Clockwise direction 
Southern hemisphere	Clockwise direction Based on the climatic region of their formation, cyclones can be classified	Anti-clock wise direction 
	Tropical cyclones / Temperate cyclone	

Goods and Services Taxes (GST) four slabs as 5%, 12%, 18% and 28%. (in TB)

Central GST (CGST)	State GST (SGST)	Integrated GST (IGST)
The tax imposed by the central government 	The tax imposed by the state government	The GST on interstate trade is imposed and collected by the central government. The share of the state government on IGST is given by the Central government.

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