Differeniate b/w occurance of lunar and solar eclipse

Solar and lunar eclipse:-

The eclipse is a astronomical event. in which on celestial body cover the other celestial body. This is happen when one eclipse object comes between observer and eclipse body.

1- Lunar Eclipse overview

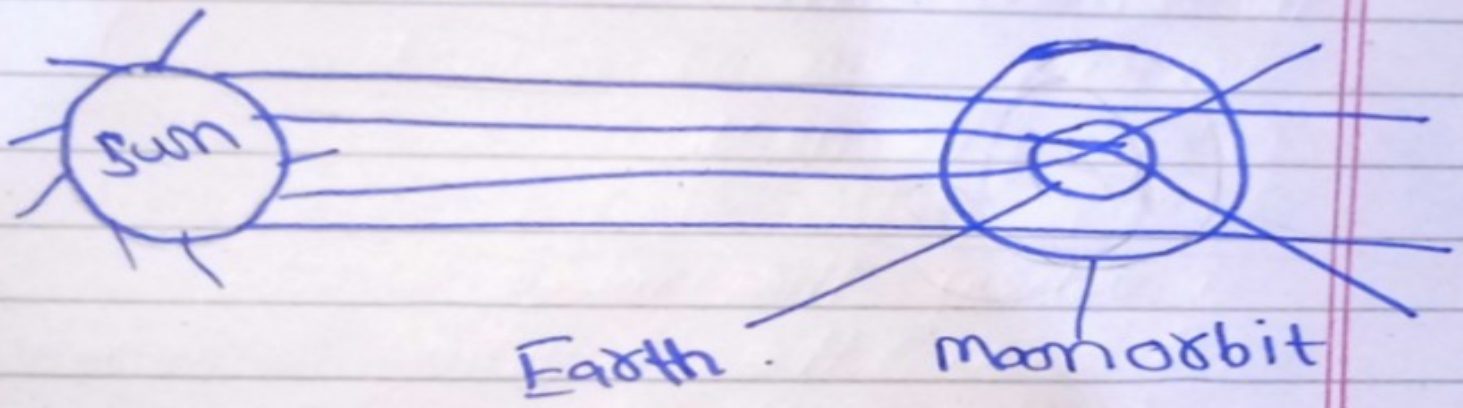
Moon is a cool and rocky body abaut 2160 in dimeter. Moon has no light but shine by sunlight from it surface. moon move around the earth once ever 29 day and hourns. The moon orbit aroun earth and changing its position with respect to sun cause the natural satellites to cycle through phase. Eclipse occur at full moon or partial moon when moon passing through the shadow of (light) Earth. it is composed of two-cone shaped which nested one another The Penumbral Zone in which the earth block but not all the ray reaching

from sun in umbral Zone light reach the moon.

1- Lunar Eclipse

when the earth between the moon and sun. The rays of sun don't reaches the moon it is called lunar eclipse

1.2 Lunar Eclipse



1-3 Type of lunar Eclipse:

There are three types of lunar Eclipse

(1) Penumbral Eclipse
(2) umbral Eclipse
(3) Total Eclipse

(1) Penumbral Eclipse:-

it is the eclipse when Moon passes through penumbral eclipse it is academic type only because they are subtle to hard see.

1.5. Partial Eclipse

when the moon partially passes through earth. it is Eclipse when the partial part of sun is eclipse and half is visible.

1.6 Total Eclipse

when the complete moon passes through Earth it is quite striking due to vibrant red color of moon.

2- Solar Eclipse definition

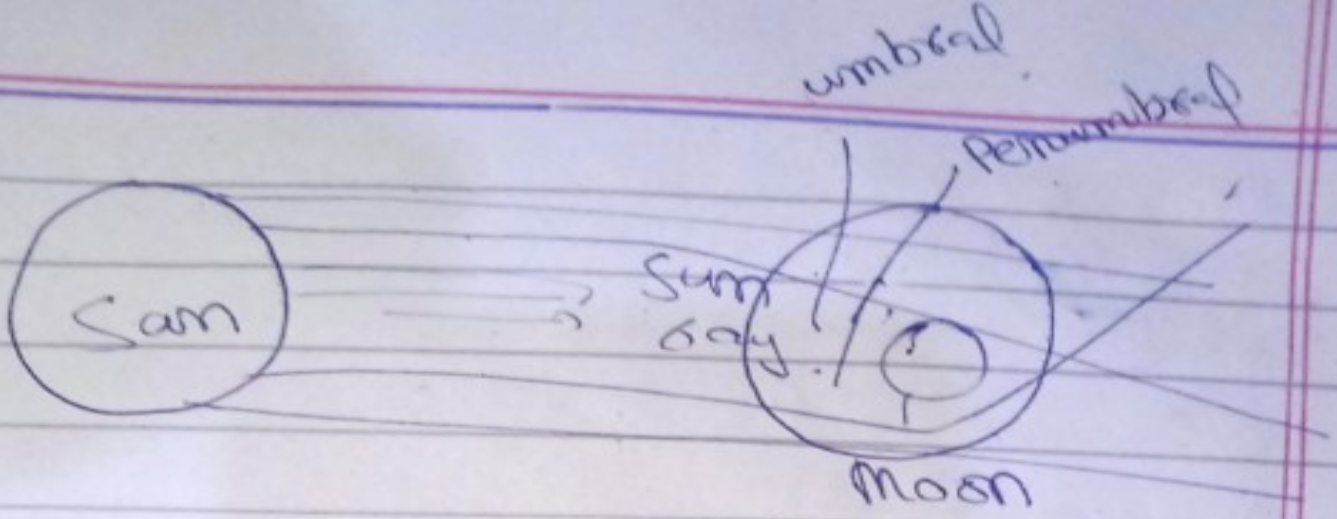
when the moon between Earth and sun the rays of light not reach the earth it is Solar Eclipse it is occur when the sun and moon have same sized. it has three types

2.1 Types of Solar Eclipse

(1) Partial eclipse
(2) Total eclipse
(3) Annual Eclipse

2.2 Partial Eclipse

it is imperfect aliment that moon cover the Sun disk. it is called Partial eclipse. it is visible in wide areas.



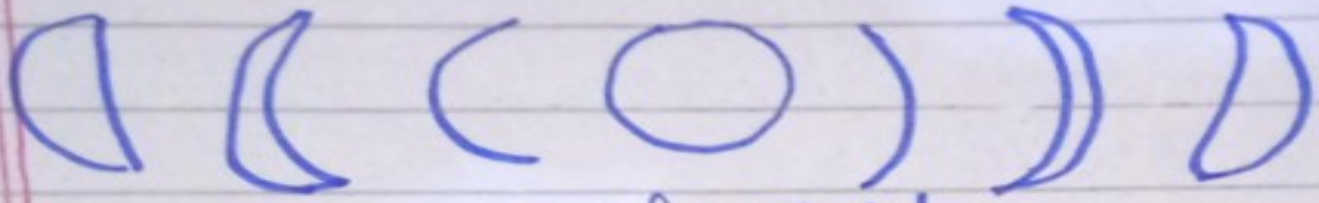
2.3 Total Eclipse

It is perfect alignment moon completely cover the disk of sun it is rarely occur because sometime size of moon is too small it is visible in some areas (Kilometer). it is also called totality.

2.4 Annual Eclipse

The moon move around the earth. but not round shape. it is in oval shaped. it varies in diameter through 21500 to 252 crores. and 13%. varing from the volume due to its shape. when it is near the orbit moon size large it is total eclipse and when far from orbit it size small it is not cover sun disk. umbral not reach the earth.

How to total Eclipse occur ?



Total Eclipse

Hybrid Eclipse

it is another type of another eclipse in which total eclipse or annuall esclipse occur. when the curve of Earth bring different points from umbral shadows. First hybrid Eclipse occur 2005 and other is 2013.

Conclusion

(1) Lunar Eclipse occur due to movement earth and earth passes through moon and sun and sun light not reachs the moon

(2) in Solar Eclipse occur due to moon passes through earth and sun and covers the Sun disk. cause Solar Eclipse

Q

Briefly Explain what effect are produce due to rotation and revolution of Earth?

(i) Rotation and revolution of Earth

1- Introduction

During may, June, July the northern hemisphere exposed to most direct sun. Because the hemisphere faces sun. The passing year can bring changes to the weather and surrounding environment. The four seasons- autumn, spring, winter and summer can vary significantly in characteristics and prompt change around them.

(i.1) Seasons

There are four seasons according

to astronomic event:

1.2 Summer

it is the hottest time of the year. the temperature increase and may to their hottest of the year. if it is spike too hot, cause heat wave and drought can effect the human, animal and plant.

1.3 Autum

The temperature begin to cool. The plant begin to grow dormant and animal prepare themselves for cold weather and store food and may travel in warmer places.

1.4 Winter

it is the coolest time in which most region experience ice or snow. and most only see cold rain. Animals find way to warm themselfs and changed their apperence to adapt.

1.5 Spring

in this season the seeds take root and vegitation begin

to grow. it is the warmer temperature animal wake up and move to hot climate often with newborn.

2. Astronomical season:-

The astronomers and scientics use the dates of equinox and solstice to measure beguning of season in a year. According to astronomy. they form four season

2.1 Spring

Merch equinoxes and ~~June~~ber solstice.

2.2 Summer

~~June~~ber solstice and ~~September~~ equinoxes.

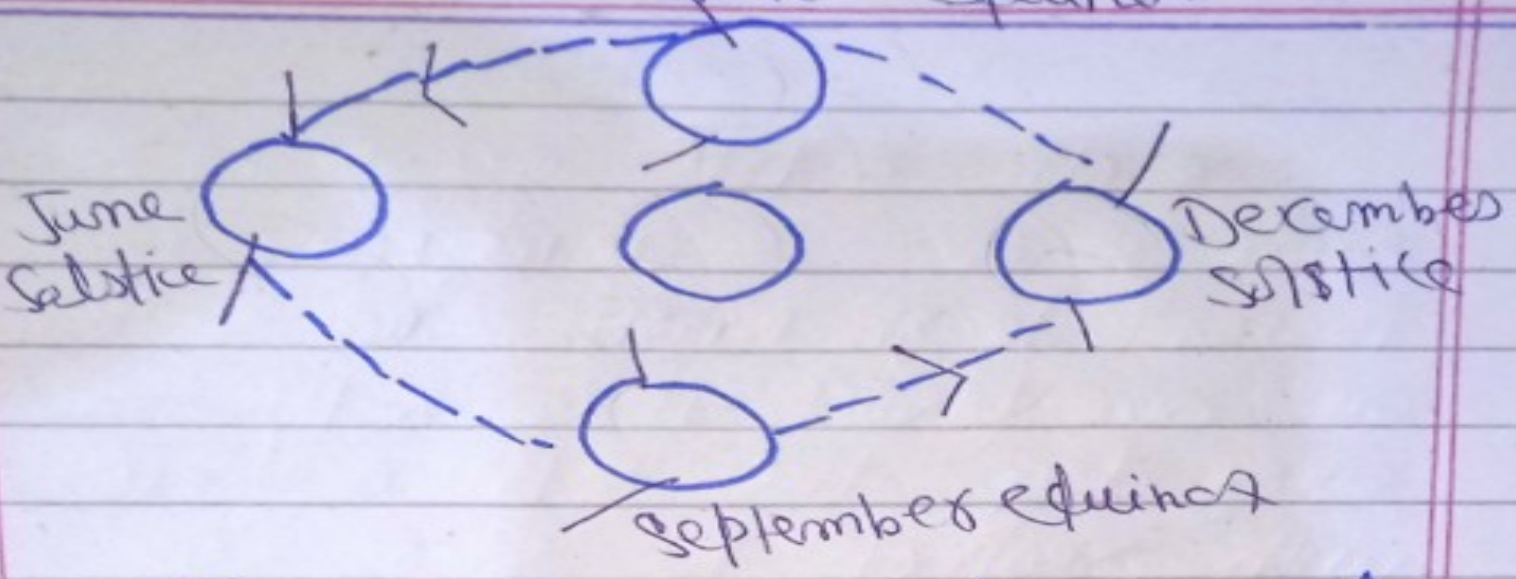
2.3 Fall / autum.

september equinoxes and December Solstice

2.4 Winter

December solstice and march equinox

Equinoxes and Solstice



3 Difference between equinox and solstice.

Solstice.

In a astronomic event occur twice in a year in which day & too long (summer) and day are too small in winter. in which earth orbit around the Earth and sun is far away from it greater distance. it is characterized by extremely long night and short day.

Equinox

in which earth orbit around the sun it not far away. the event occur twice when earth equator pass through the sun. and light of sun directly on equator.

Rotation of earth :-

earth rotate around the sun it is a immaginary line passes through North and South on our planet. it is rotate one every day. the rotation of earth with respect to stars are called sidereal. it is about 24 hours sidereal and 23 hours and 53 minutes. the orbit around sun is 24 hours. the earth 1/365 away from around the sun. There is a small difference between sidereal and solar time.

Time of our clocks is based on rotation of earth. the season tilt due to rotation 23.4 degree. and the earth rotate 360 degree to change the day and night.

4 orbit

it is a gravitation orbit of an object in a point space.

Example Stars orbit the planets

4.1 Types of orbit.

(1) Circular

(2) elliptical.

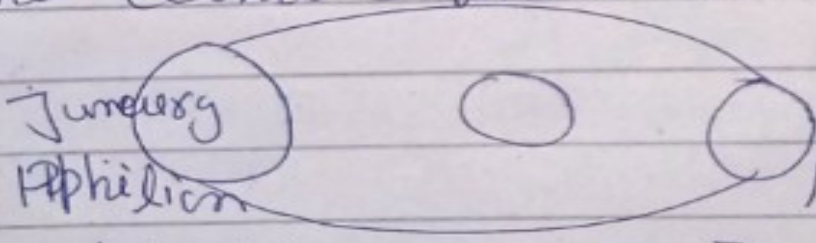
4.2 Circular

The earth move around the Sun it is a fixed movement of object around the orbit.

4.3 elliptical

in which earth move and other planets around sun. it is oval shaped.

The Aphelion is far away from Sun and perihelion close to sun. The distance. is 0.167832. and eccentric from sun. 1.432.



and 1.0167382 is From Perihelion

conclusion

The movement of earth responsible for Change of weath time and Years

Q

What is an earth quack? Discuss Richter Scale in this context. what was the intensity of earth quack in Pakistan dated 26 octobes 2015 and where was the focus?

(2) Overview / Key Points of earth quack.

it is occur due to movement of tectonic plates. The point where the earthquack rupture start are called focus.

Defination

The suddenly shaking and falling of earth is called earthquake it is occur daily around the world but it too mild to be neglected. (about 8000 earth quack occur every year).

2 Type of the Earth Quack.

There are two type of earth quack.

(1) Shallow earthquack

(2) Deep earth quack

2.1 Shallow earthquack

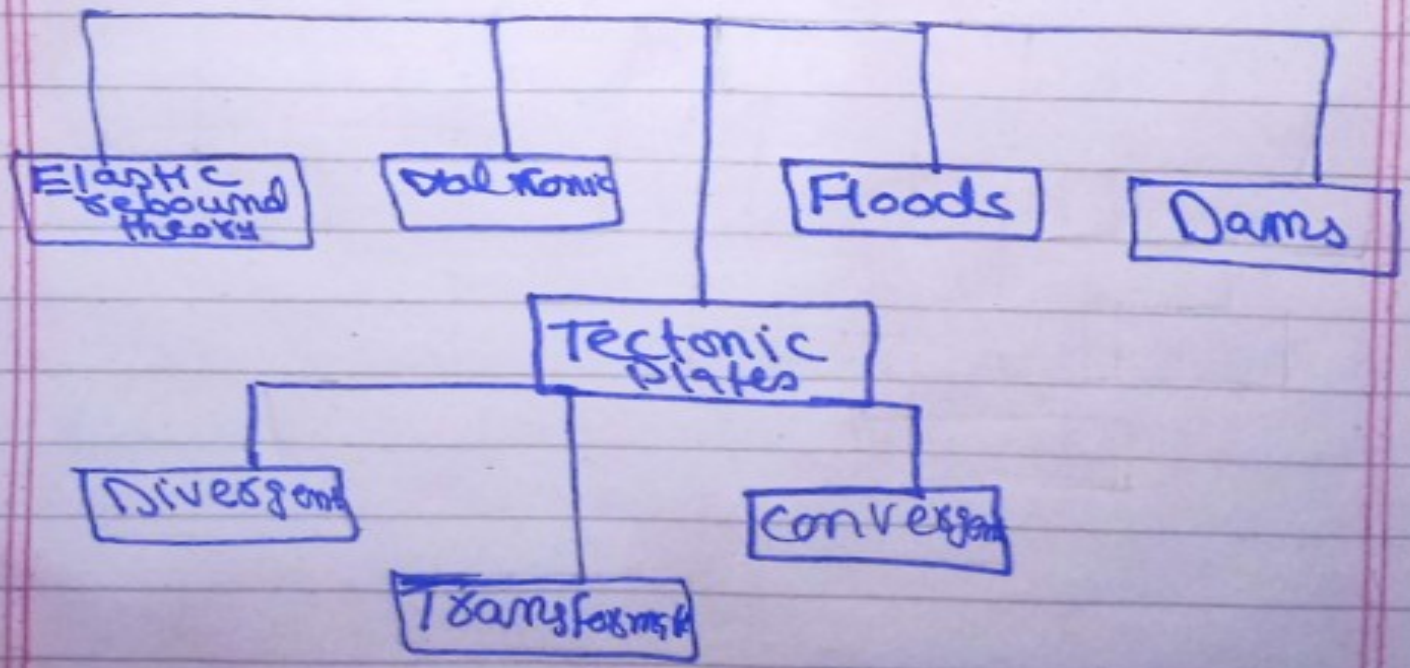
The Shallow earth quack occuring "Crustal" due to Facult and movement of Contenantial Plate. These earthquack are deep surface with their earth crust The are deep and cause greater damage at the surface of earth. They occur quite frequent and at random. However begin these magnitude is law due to few deeper and most of them are not felt. Nevertheless 75% of the energy release from earth quack are shallow once.

2.2 Deeper earth quack

The deeper earthquack is "inter

Plate. which is occuring due to sub-ducting occanic plate which brings the Contenantal plate. The are occurs due to tectonic plate come towards each other. followed by Sub-dection or when the marine olivine is in transactional phase This is sub-ductional zone or highly seismically active Zone. form a patter wadati Benioff Zone. High magnitude and energy released during earthquake

3- Causes of Earth Quick

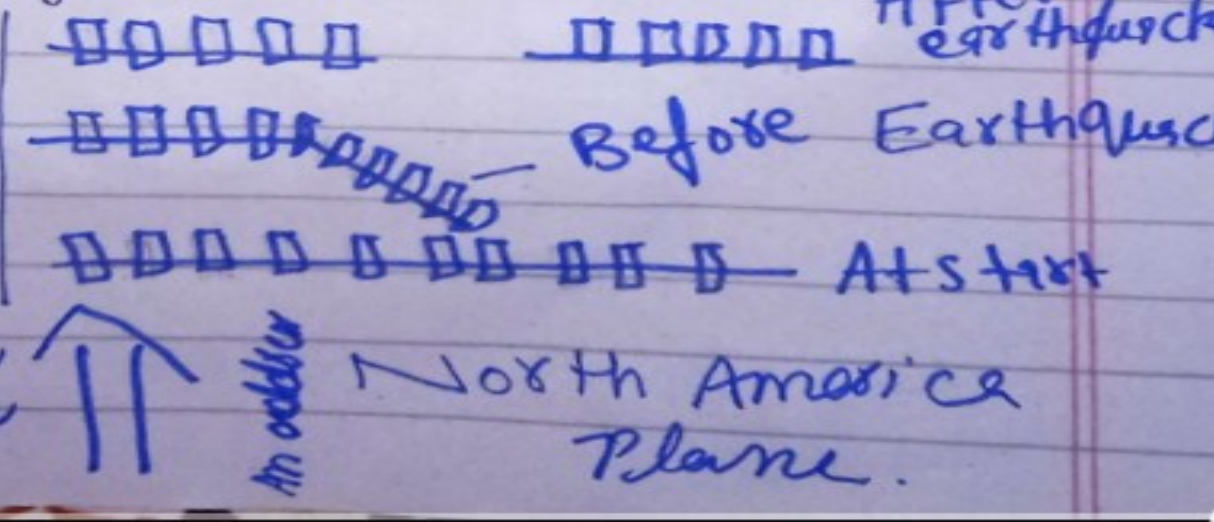


3.1 Elastic Rebound theory

Elastic rebound theory is presented by Henry fielding Ried in 1906. He was a professor of geology in Johns Hompkins gave theory that if the Rubber is streched it cut or breakdown energy is release after the streched. Same as the earth crust after the earthquck energy release. most of the earthquck occurs due to previous energy store energy.

3.2 Tectonic Plates

Earth is not uniform. they have huge block meet one another these huge block are called Tectonic Plate. in Tectonic Plate have intense energy around around the boundry. called Focus After a Years Tectonic Plates move and Create a weak point called Focus. in which rupture of earthquck start

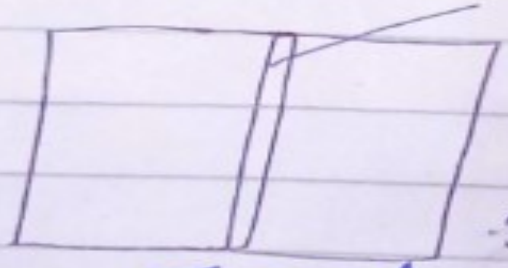


3.2 Convergent Plate

Plates come toward each other either one is callidal and other is Subductile Zone. the upper Plate is oceanic push the downward the mantle it begin to melt.

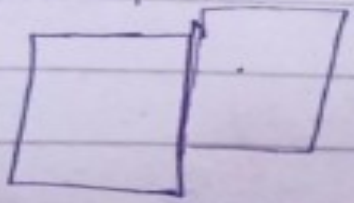
3.3 Divergent Plate

when both the plate are apart from each other. earth wides area are shake. The lava is sprews along the Fissures and ~~rivers~~ and super heated water. Beneath the rifts molten the rock rises from mantel.



3.4 Transform Boundary.

when boundary of both plates jump against eachother.



3.5 Volcanic acitivity

Volcanic activity cause earthquake

due to magma rise in volcanic chamber push the plate and cause earth quack

3.6 Dams

Long time water store in dams increase pressure underlying rock which cause the rocks break and sudden vibration cause earth shake

3.7 other causes

land sliding, Emission of water vapour under high pressure and bomb explosion etc.

4- impacts of Earth quack on human:

Earth quack effects human health. it cause injuress, trauma and dead.

Example

earth quack of 2 october 2005 in Kashmir magnitude 7.6 effect the thousands of people.

5- Richard Scale.

The logarithemic scale used to measure the strength and energy of earth quack. seismic wave

are measure which transmit the energy release by esrthquech.

26 October 2015 Esrthquech

its region is Pakistan and afghanistan. its magnitude is 7.5 and 80km from the esrea of Jayyazbade region of Hindu Kash.

4.3 Can esrth quech predict in advance??

No, there is not currently possible to predict the rigen and occurance of esrthquech.

5- Conclusion.

Esrth quack occur movement of tectonic plates and its effect on herman and earth also. it cause the destruction of bnidiny and dreason of dead of thousnds peoples.