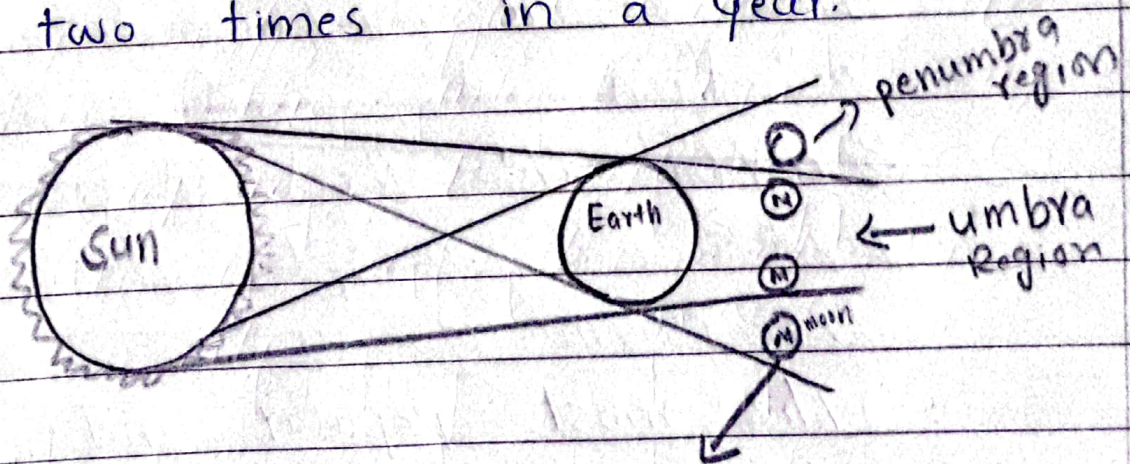


1 Differentiate between the occurrence of Lunar and Solar Eclipse:

i (i) Lunar Eclipse:

- 1 Lunar Eclipse occurs when Earth shadow falls on the moon.
- 2 Lunar Eclipse occur when moon is full.
- 3 It is safe to see the Lunar Eclipse with naked eye.
- 4 Lunar Eclipse occurs at night.
- 5 It remains for three to five hours.
- 6 Lunar Eclipse occurs mostly two times in a year.



(ii) Lunar Eclipse Fra. penumbra Reg.

Solar Eclipse.

- i Solar Eclipse occurs when moon casts shadow on Earth.

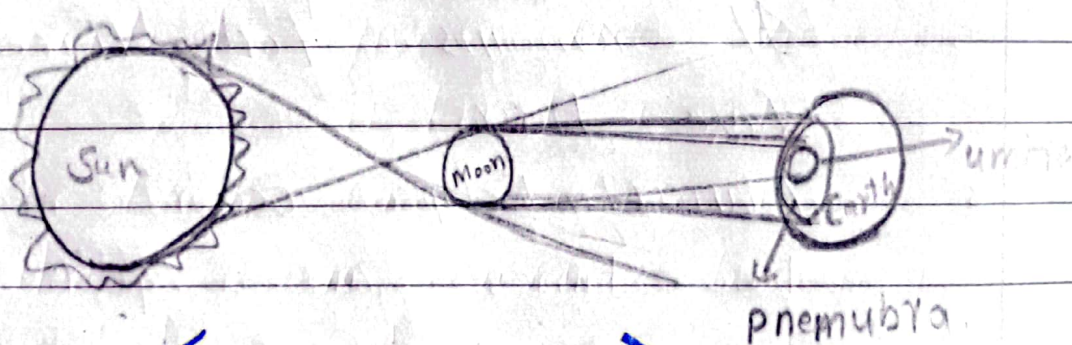
(ii) Eyes can be damaged if someone looks at Solar Eclipse with naked eyes.

(iii) ~~A~~ Solar Eclipse occurs when moon is new.

(iv) Solar Eclipse occurs in a day.

(v) It remains only a few minutes.

(vi) Solar Eclipse occurs after 18 months.



Q2 Briefly describe the most popular and accepted theory about the origin of universe.

The most popular and accepted theory about the universe is the Big Bang Theory.

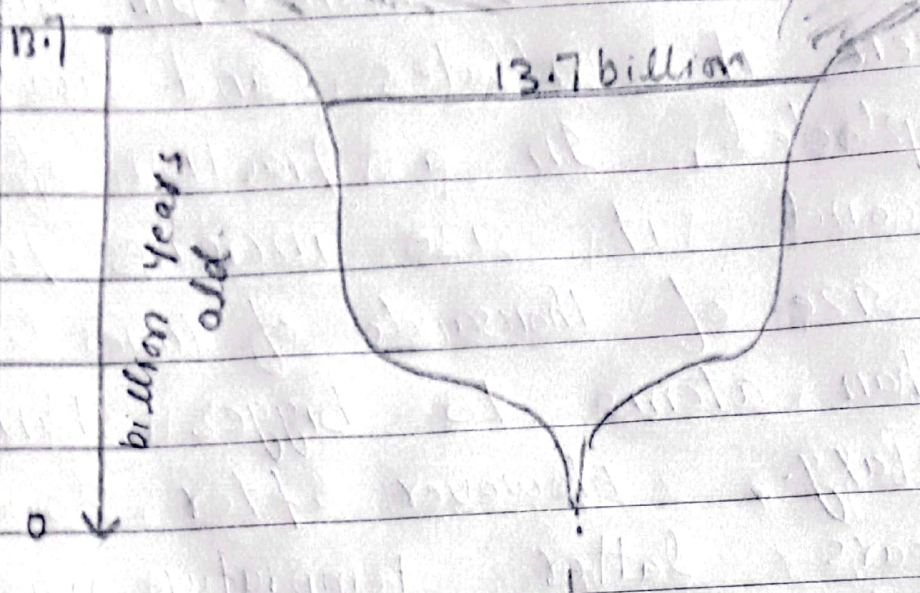
According to this, Our universe is 13.7 billion years old.

So 13.7 billion years ago,

OUR Universe was inside a bubble which is thousands of times smaller than a pin Nimb. Then it inflates and suddenly exploded, In a fraction of second it size increases from a size of thousands of times less than atoms to bigger than galaxy. However after, 30,000 years latter temprature was cool enough for atoms to form and then atoms forms and after many billions of years latter after solar system formed which is only 4.5 billion years old. It is believed that universe is still expanding and it releases light waves ~~at~~ which has observed inthe different parts of universe.

Most of the astroners believes on this Big Bang theory. But there ^{are} also many scientist who

do not believe on this theory.



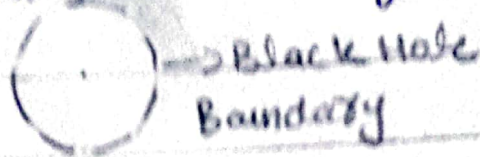
Scientist gives two evidence to prove that it is based on truth. One evidence is the cosmic microwave background radiation and second evidence is the red shift star.

Q3 What is black hole. How Black Holes are formed and discovered.

Black Hole:

Black Hole is a region in a space which has so much strong gravity that it do not let any thing to escape from its bounday, not even

light Scientist ^{found it by} observing the



patterns of stars in the space. They have seen that many stars are revolving around a region. So they called it Black Hole.

Black Holes formation:

Black Holes are formed from a star which is several times bigger than our star.

When a huge star formed from nebula in the space, then it burns all its fuel for several billion years, when its fuel ends. Then, gravity breaks its inner structure

through supernova. In this way gravity becomes so strong inside the center of its region that

it does not let anything to escape out of its region, not even light.

Star Formed
from Nebula
clouds

Complete Fuel
Burning cycle.

Supernova

Gravity
Concentrate at
center

Black
Hole.

