

Name: _____
Father Name: _____
LMS ID: _____ Date: ____/____/2024
Subject: _____ Paper: _____ Test: _____
Batch No. _____ Campuses Main Campus ISB-2 RWP-I RWP-II LHR Online

Candidate Sign

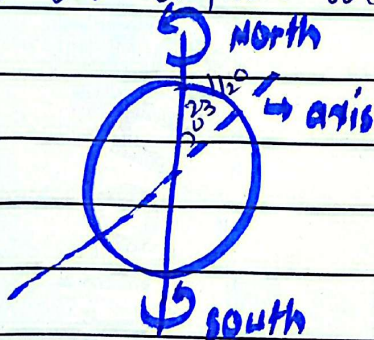
Invigilator Sign

GSA

Q Define Earth rotation and revolution and also write their significance.

• Earth rotation:

Earth rotation is a phenomena in which earth rotate around its axis from west to east. it take 24 hour for complete rotation. Earth rotate at $23\frac{1}{2}$ angle.



Significance of Earth rotation

Earth rotation creates following significance.

(1) it causes diurnal cycle

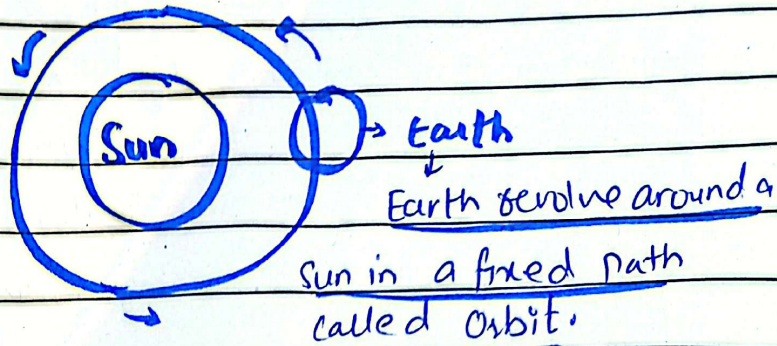
The earth rotation produces a darkness and lightness in alternative way. it also causes a fluctuation in temperature and humidity.

(2) It cause a high tide in ocean and seas.

when earth rotate, different water bodies is present at different location from moon and sun. The surface of earth facing toward moon experience a high tide while other not.

•→ Earth Revolution

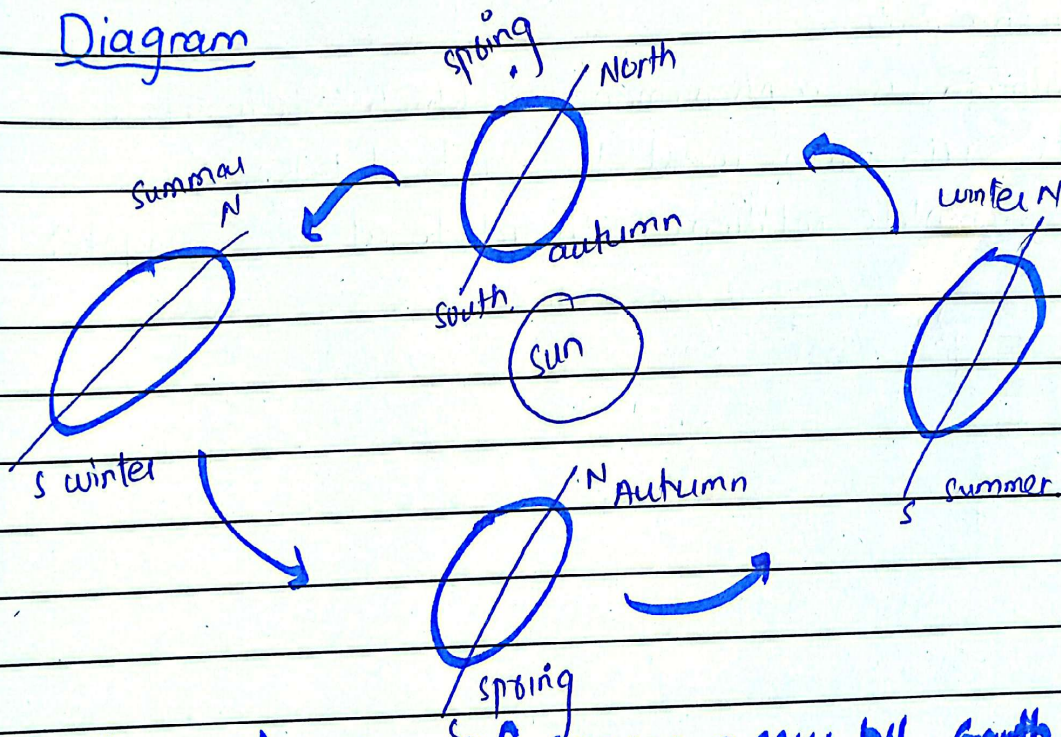
The phenomena in which earth revolves around the sun called earth revolution. Earth take 365 days to complete its revolution.



Significance of Earth Revolution:

- Earth Revolution causes a seasonal changes

Diagram



How change of season occur by Earth revolution?

When earth revolves around the sun, some part of earth get close to earth and receive maximum sunlight, and experience summer, while other side away from sun, experience a winter.

Q Write a difference between star and planet?
 What is magnitude of star and how colour is correlated with temperature?

Star	Planet
<p><u>Definition</u></p> <p>star is a celestial body which have their own light and can reflect light by its own.</p>	<p>planets is a celestial body which donot have internal source of light and reflects light from external source.</p>

Numbers

stars are several thousands in number. Their are eight planets.

Size and temperature

star are huge in size and have a high temperature. planets are small in size and have a low temperature.

life cycle

stars shows life cycle. planets donot show life cycle.

What is magnitude of star?

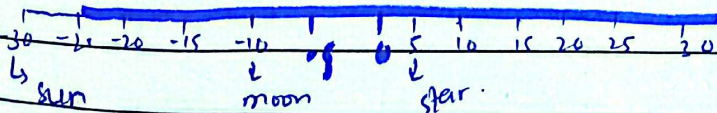
Definition

The brightness of star is called magnitude of star.

Measurement of magnitude of star

The magnitude of star is measured by **stellar magnitude scale**.

- Brightest star have a lowest number
- fainter star have a highest number.



How colour is correlated with temperature?

According to Plank's equation

$$E \propto \frac{1}{\lambda}$$

The star which have high surface temperature, they have a high energy and emit light of shorter wavelength such as Blue colour. White which have high temperature emit high wavelength radiation. e.g Red.