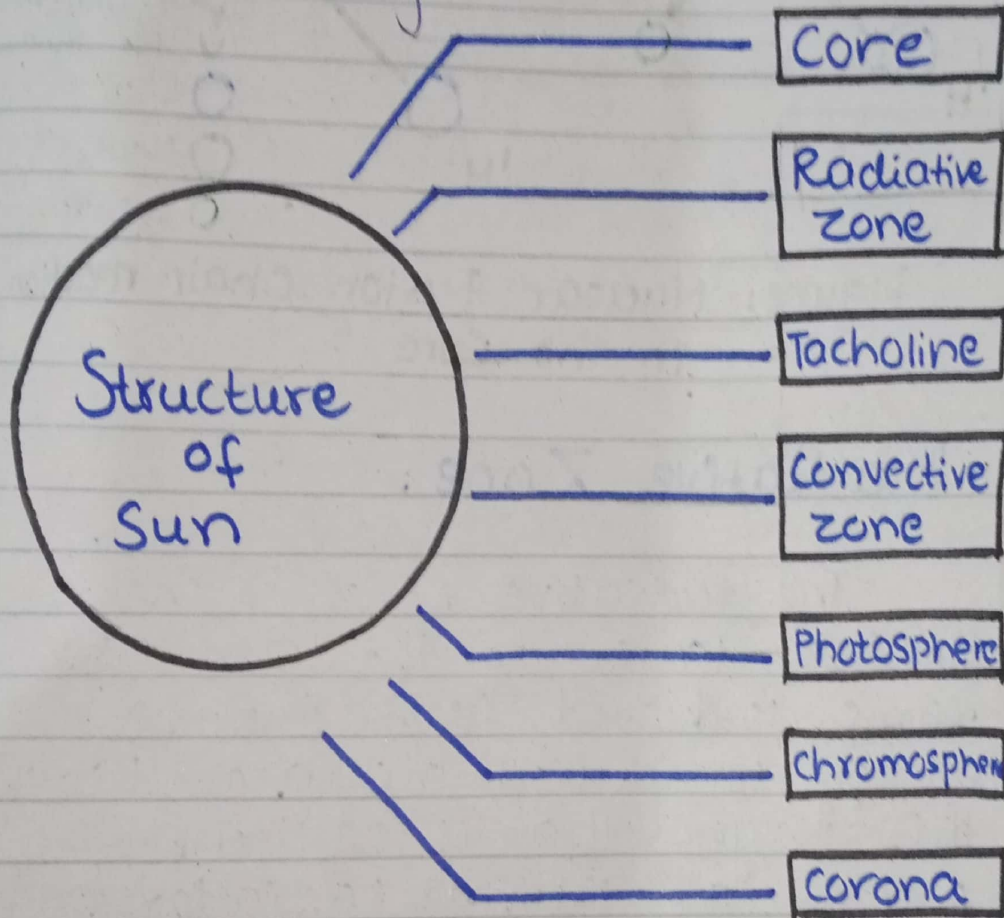


Q: write Short Note on Structure of sun. (5 marks)

Structure of Sun

The structure of the sun is divided into seven layers.



(I) Core:

The core is the central part of the sun. It is the hottest region where the nuclear fusion reactions occur. The temperature of this region is 15 million °C

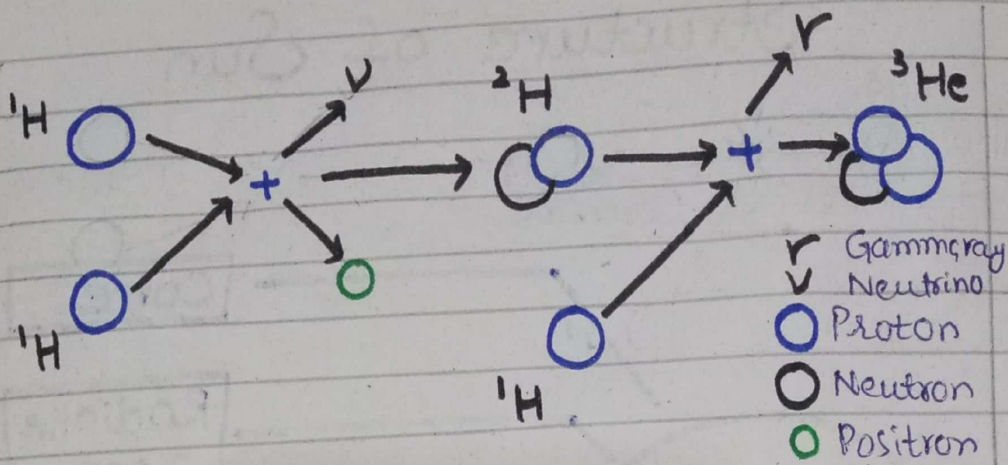


Figure: Nuclear Fusion chain reaction in the Core

(II) Radiative Zone:

The radiative zone is the thickest layer of the sun. Its name is derived from the way energy is carried outward through this layer that is carried by photons as thermal radiations.

(III) Tacholine:

Tacholine is the transition layer between radiative zone and convective zone.

(IV) Convective Zone :-

In this layer, heat moves through upward convection. The convection plasma is not dense enough to transfer the heat energy through radiation. As a result, thermal convection occurs.

(V) Photosphere :-

The visible layer of the sun is called photosphere. It is the layer where most of the sun's energy is emitted.

(VI) Chromosphere :-

The layer above the photosphere is the chromosphere. It emits reddish glow.

(VII) Corona :

Corona is the outermost layer of the sun consisting of hot ionized gas. It has a temperature of approximately two million kelvins. It can only be seen during solar eclipse.

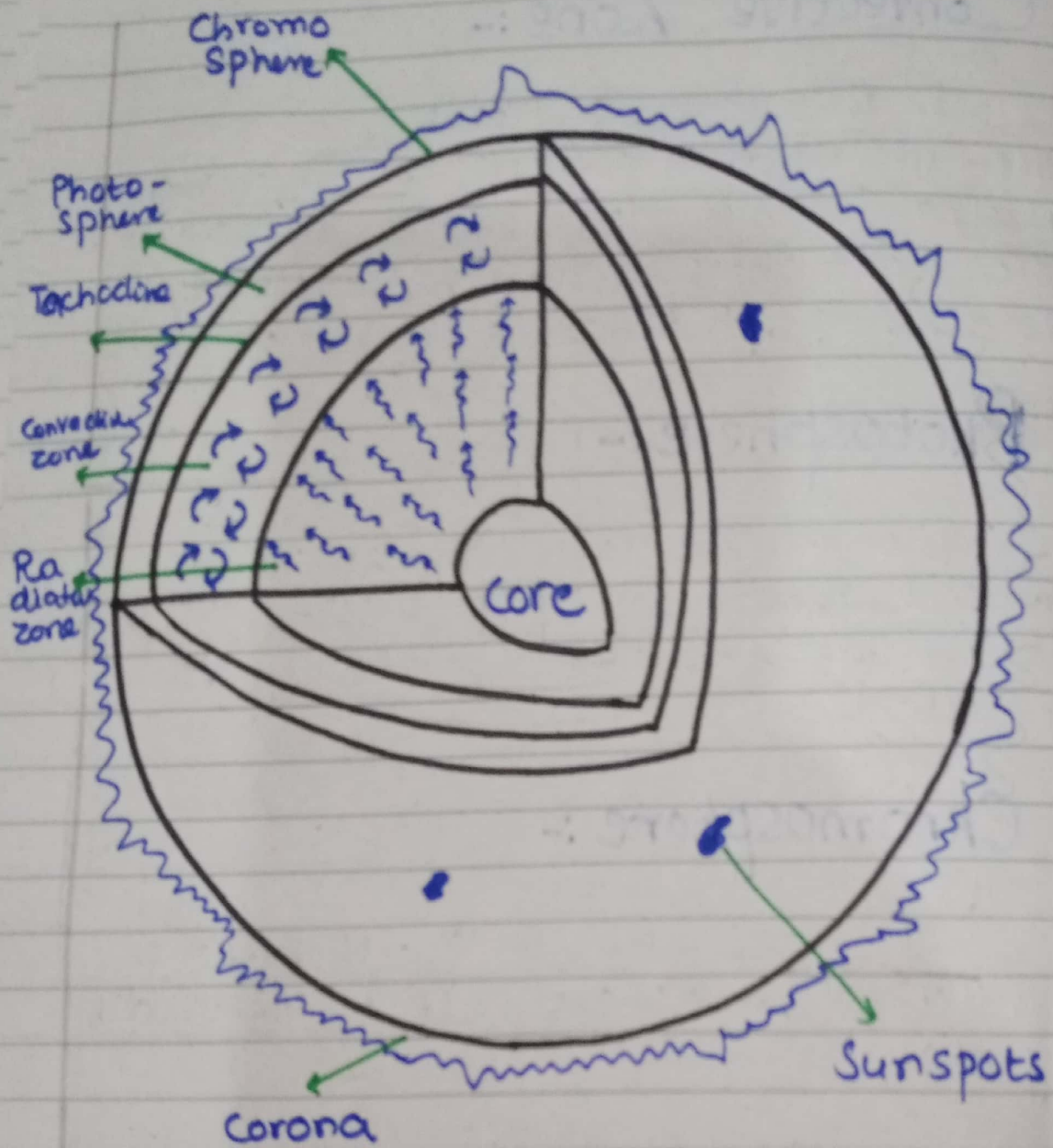
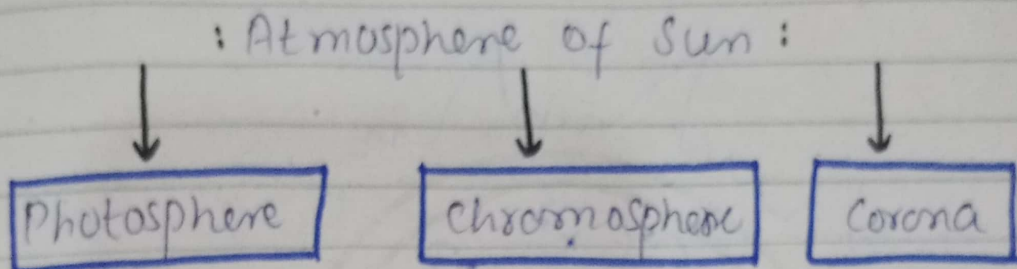


Figure: Structure of Sun

Q: write down about Atmosphere of Sun (5 marks)

Atmosphere of Sun

The atmosphere of Sun is composed of three regions.



I) Photosphere:

The photosphere is the lowest layer of the atmosphere of the Sun. The temperature of this layer ranges from 6125°C to 74160 & 4125°C . It is marked by bright, bubbling granules of plasma and sunspots. This region is visible.

II) Chromosphere:

The layer above the photosphere is the chromosphere. It emits reddish glow as super-heated hydrogen burns off.

III) Corona :-

The third layer of the sun's atmosphere is the corona. It appears as plumes of ionized gas that flow outward into space.

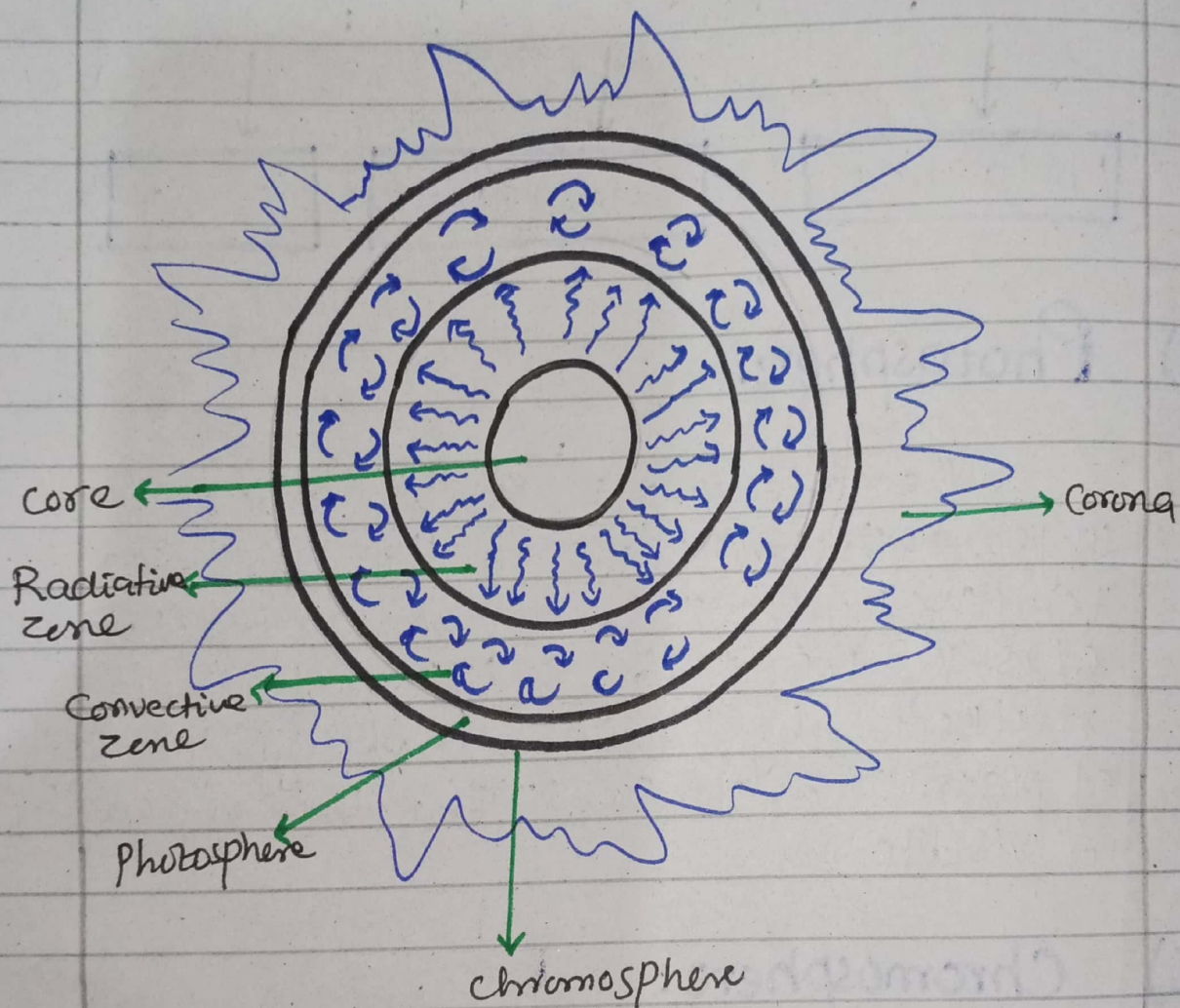


Figure : Atmosphere of sun