"Section - 3"

Q.No-1

* Hydrological Cycle :-

→ Hydrological cycle is also known as water cycle.

→ It is the continuous movement of water in the air, on the surface of land.

→ The hydrological cycle is involved in the Total earth system. The Total system can be classified into three important zone.

→ Atmosphere, Hydrosphere and Lithosphere.

→ Atmosphere forms the gaseous envelope that is above the Hydrosphere.

→ The environment that is below the Hydrosphere till the solid Rock forms the Lithosphere.

* Components of Hydrological Cycle :-

1) precipitation.
2) Run off
3) Evaporation
4) condensation
5) Transpiration.
6) evaporation.
7) infiltration
8) Depression Storage.
9) Interception

* Precipitation :-

→ It is the water flowing over the land making its way towards Rivers, lakes, oceans etc as surface or subsurface flow.

* Evaporation :-

→ It is the conversion of natural liquids like water into gaseous form etc. air.

→ Evaporation Happens in the water bodies.

* Transpiration :-

→ It is the evaporation taking place from any plant or greenery. for example, a water droplet on a leaf getting evaporated into the atmosphere.

* ~~Interception~~ ~~Depression~~ Storage :-

→ past of precipitation required to wet the surface of soil, buildings and all porous surface is called interception

* Depression Storage:
- It is the past precipitation required to fill depression zones of land.

* Procall of Hydrological Cycle:
→ The process of the Hydrological cycle starts with Oceans. water in Oceans, get evaporated due to heat energy provided by Solar Radiation and form water vapors.
→ The water vapours moves upwards to higher altitude forming clouds.
→ The portion of water that reaches the ground enters the earth's surface infiltrating various strata of soil.
→ This procall ~~~~ changes the moisture content around of the water Table.
→ The water percolates into the soil, thus increasing the water Table and also the formation of Runoff waters ~~~~ heading towards water bodies.
→ Thus the cyclic procall continues.

* Water balance equation *

→ The water balance equation describes as

Precipitation − Runoff = Evaporation

that gives -

precipitation = Evaporation + Runoff

P = E + R

* Diagram of neat Sketch *