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	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Water

Syllabus

Importance, states of water in the environment, physical, chemical, and Atmospheric moisture, Precipitation types (Rain, snow, hail, dew); Hydrological cycle, water in soil, water table.

Importance: Water is an universal solvent, so it is the general solvent in living beings. All ~~the~~ chemical reaction occurs in the solution form. Water is required for maintaining the turgidity of cells and proper functioning of protoplasm. The water available to plants and animals from soil comes as a result of rainfall. In fact, water during rainfall is directly of little or no use to the organism. It is used only after reaching to the soil.

The amount and periodicity

Sunday

10

of precipitation as rainfall are highly important in influencing the vegetation of a region.

~~Low~~ ~~rainfall~~ low amount of rainfall produces aridity and desert condition whereas high rainfall influences dense evergreen forests. Area having little summer precipitation but sufficient rainfall in winter produce only scrub forest. The reverse rainfall (sufficient in summer and little in winter) results in the formation of a grassland.

in tropical rainforest, after heavy (to be torrential) rain large amount of water comes down the trunk and fills the pore space in the soil causes soil colloids and swelling decreasing the rate of percolation, As a result

Monday

10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28

a large amount of water moves over the surface of the soil as run-off water. If the velocity of run-off water multiplies it may cause soil ~~err~~ erosion or even cause flood in the plains.

Nearly 80% of the fresh weight of the tissues is comprised of water.

Water serves as a medium for the movement of various dissolved substances like gases, minerals, organic solutes etc. in the xylem and phloem tissues.

Water takes direct part in many metabolic reactions taking place in the cell viz - photolysis of water during photosynthesis.

Tuesday

Absorption of water compensates the water loss by the plants caused due to transpiration.

Water stabilizes structural organisation of a number of biomolecules.

From above discussion it is clear that water plays an important role in plant life individually and formation and adaptation to different environmental conditions of the world as a whole.