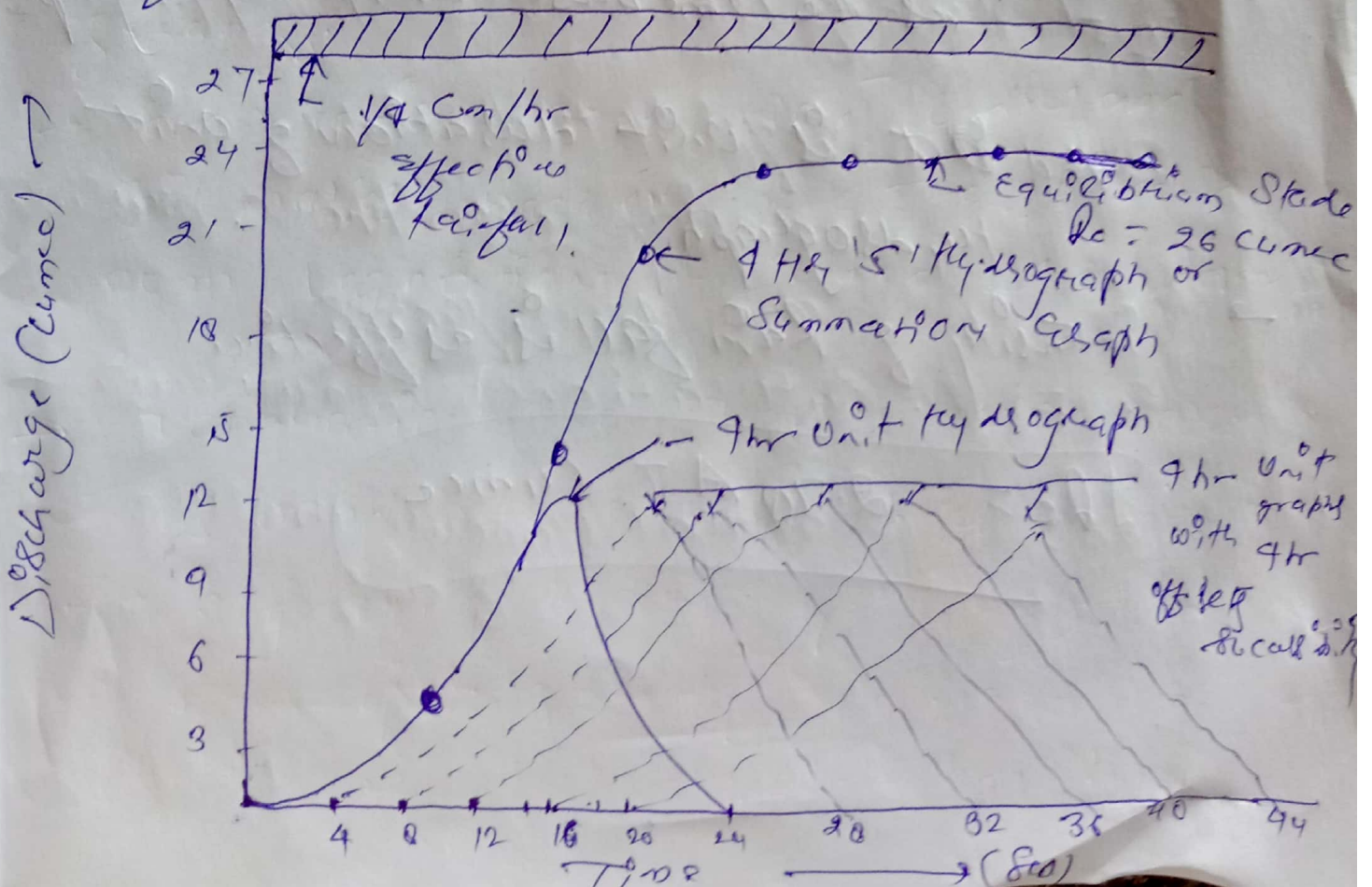


Section - 2

Concept of S-Hydrograph

→ S-Curve or S-Hydrograph is nothing but a hydrograph generated by a continuous effective rainfall occurring at a uniform rate for an indefinite period.

→ It is called 'S' hydrograph because the shape of the hydrograph comes out like alphabet 'S' though slightly deformed.



→ From the knowledge of the rainfall-runoff process it can be visualized that since the rainfall is occurring at a uniform rate indefinitely a stage will reach from when to direct runoff rate will equal effective rainfall rate.

→ The hydrograph curve traces a horizontal line parallel to x-axis.

→ At this stage it is necessary to know how many times the unit hydrograph have to be successively plotted.

Ww.

T is the Time base unit hydrograph.

And t is unit duration of unit hydrograph.

→ Intensity of rain fall is as effective

$$I_{de} = 2.70 AI \text{ Cumec}$$