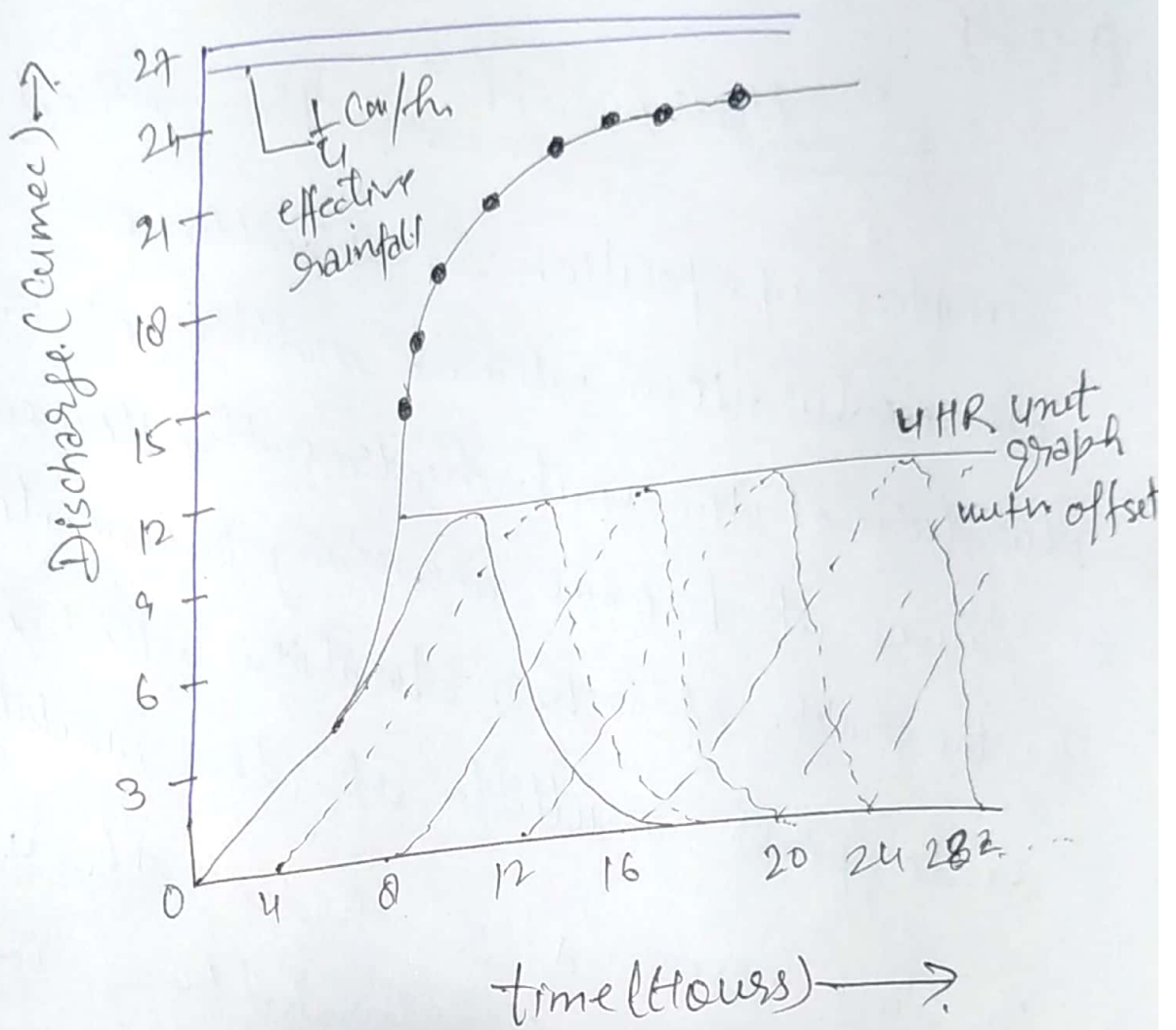


Section - 2

Ans-1

S Hydrograph. \Rightarrow the method of.

Simple superposition is applicable only when other duration integral multiple of the available duration of the unit hydrograph. However, many a times it becomes necessary to generate a unit hydrograph of other duration which is not integral multiple of the available duration. In such cases, a '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 come out like alphabet S though slightly deformed. Show in the figure a typical 'S' hydrograph in the next page.



Construction of 'S' hydrograph

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