

Ans 1

(i) Well Losses \rightarrow when water is pumped out of a well, the total drawdown caused includes not only that of the logarithmic drawdown curve at the well face but also drawdown caused by flow through well screen and axial screen movement within the well. The latter drawdown is called well loss.

(ii) Specific Capacity and Specific Yield of an aquifer.

The volume of water expressed as a percentage of the total volume of the saturated aquifer that can be drained by gravity is called the specific yield S_y and the volume of water retained by molecular and surface tension forces against the forces of gravity expressed as percentage of the total volume of the an. aquifer with a water table (unconfined aquifer) the value of water retained

from ground water storage. for und. surface area (2)

$$\eta = S_y + S_r$$

(iii) Rain water harvesting \rightarrow the harvesting of rain-water simply involved the collection of water from the surface of which rain falls, and subsequently storing this water for later use. Normally water is collected from the roofs of buildings and stored in the rain water tank

(iv) Aquifer and aquiclude:

Aquifer \rightarrow An aquifer is an underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand or silt). Groundwater can be extracted using a water well. The study of water flow in aquifers and the characterization of aquifers is called hydrogeology.

Aquiclude :- An aquiclude is a geological formation which is impermeable to the flow of water. It contains a large amount of water in it but does not permit water through it and also does not yield water because of its high porosity, clay is an example of aquiclude. (3)

(iv) Radius of influence and Cone of depression :-
 The radial distance out from the well over which this water boundary is actually lowered below that of the static water table, is termed the radius of influence and the approximately 100m this must be taken into account for the proper spacing of wells (Baetton 1954)

