

INSTRUCTIONS: ATTEMPT ALL THE QUESTIONS.

- 1. In a phreatic aquifer extending over 1 km^2 the watervtable was initially at 25m below ground level. Sometime after irrigation with a depth of 20cm of water, the water table rose to a depth of 24m bgl. Later $3 \times 10^5 \text{ m}^3$ of water was pumped out and the water table dropped to 26.2 m bgl. Determine i) specific yield of the aquifer ii) deficit in soil moisture (below field capacity) before irrigation.**

Solution

- 2. In an area of 100 ha, the water table dropped by 4.5m. if the porosity is 30% and the specific retention is 10% determine i) the specific yield of the aquifre ii) change in groundwater storage.**

Solution