

GEOL 5403. Hydrogeology Practical (1 credit)

Identification and demarcation of Watershed boundaries, Interpretation of well inventory data, Determination of groundwater flow direction, Preparation of water table contour map. Estimation of permeability. Analysis of hydrographs and estimation of infiltration capacity. Pumping test – Time, Drawdown and time recovery tests. Evaluation of aquifer parameters, Study of depth and yields of bore wells. Study of Electric resistivity sounding data for delineation of fresh and saline aquifers. Study of geophysical well logs. Exercises on groundwater exploration using remote sensing techniques. Exercises related on ground water modeling with given data.

Reference

- Bouwer, H. 1978, Groundwater Hydrology, Mac Graw Hill Co. Ltd
- Chaw, V.T., 1984, Hand book of applied hydrology, New York Mc Gra Hill Book Co Inc.
- Davis, S. N. And R. J. M. Dewiest R. J. M., 1966. Hydrogeology.
- Johnson Division, 1975, Groundwater and wells, UOP Inc.
- Karanth, K.R. 1987. Groundwater Assessment Development and Management, Tata Mc Graw Hill,
- Patric, A.D., Franklin W.S. 1997, Physical and chemical hydrogeology, Wiley.
- Poehis D.J, Gregory J.S. 2011. Encyclopedic dictionary of Hydrogeology, Academic press.
- Reghunath, H.M. 1992. Groundwater. 2nd Edn. Wiley Eastern Limited.
- Subramaniam, V. 2000, Water, Kingston Publication London.