

Discipline Specific Elective-2 - Hydrogeology

Block-I Hydrogeology: Concepts

Unit-1 Hydrological cycle,

Unit-2 Aquifers –Properties, classification, Distribution of groundwater

Unit-3 Darcy's law and its validity

Block-2 Groundwater Exploration

Unit-4 Geological Exploration

Unit-5 Geophysical Exploration

Unit-6 Remote sensing and GIS for groundwater studies

Block-3 Groundwater pollution

Unit-7 Groundwater – Quality

Unit-8 Groundwater – Pollution

Unit-9 Sea water intrusion

Block-IV Applied aspects

Unit-10 Groundwater management

Unit-11 Watershed management

Unit-12 Groundwater modeling

DSE-2 Practicals - Hydrogeology

Block-I Groundwater Exploration

Unit-1 Water Balance Studies

Unit-2 Electrical methods

Unit-3 Well Inventory

Unit-4 Remote sensing and GIS Exploration methods

Block-II Groundwater Quality

Unit-5 Physical and Biological parameters

Unit-6 Chemical parameters

Unit-7 Groundwater suitability maps

Unit-8 Watershed maps