

**DEPARTMENT OF EARTH SCIENCES**  
**SEARVAC01 – Water Resource Management**

**Learning Objectives**

To know and understand the importance of water  
Treat to water resources  
Management of water resources

**Course Outcomes**

- Students will gain knowledge over the water resources
- They know about different harvesting system.

**Unit I**

Introduction – Scope and advantages of Groundwater- Aquifer- Infiltration -  
Water table – forms of water

**Unit II**

Hydrologic cycle- sources of Groundwater- Origin and occurrence of  
groundwater. Water conservation

**Unit III**

Water harvesting - Rainwater harvesting - Groundwater harvesting-  
methods of harvesting-Rural and Urban. Drip irrigation. Water-wise habits

**Unit IV**

Water Quality – standards of water for different uses- Drinking purposes-  
Irrigation purposes- Industrial purposes

**Unit V**

Water Pollution- Introduction- Types of pollution- controlling methods

**Books for study:**

Arul.P (2000) A text book of Ground water, Dhanam Agency, Virudhachalam  
2<sup>nd</sup> Ed.

Raghunath H.M (2015) Hydrology 3<sup>rd</sup> ed. New Age International publisher.

Todd, D.K. (1980).Groundwater Hydrology, John Wiley and Sons, 2<sup>nd</sup> Ed.