

TD 603 Topics

(as discussed by Pooja, Milind, Puru and Om on 26th June, 2013)

No	Topic	Lecture Hours	Tutorial Hours	Remarks
1.	Water-An introduction. Properties of water. Basic Supply and demand. Various sectors and sector efficiency. National and International statistics.	1		
2.	Motivation-The regional water plan. A GP as a case study. Basic nature of demand and supply. Water assets and institutions.	2		
3.	Hydrological cycle and water balance. The basic stocks (such as surface, groundwater) and flows (such as infiltration, run-off). Measuring these quantities. Writing balance equation for unit situations.	2		
4.	Watersheds and Maps. The watershed and associated quantities. Balance. Various Maps and their use.	3	1	
5.	GIS. Quantum GIS with Thane dataset. Managing and updating data.		2	
6.	Grounwater. Aquifers and conductance. Darcy's law and 1-dimensional situations.	4	1	
7.	Interventions. CTC, dams, weirs and their basic concepts.	2		
8.	Case Study. A student presentation.	2		
9.	PWS. Basic design principles. EPAnet demonstration.	2		
10.	Revisiting regional plans. Programs, problems and solutions.	2		