6CE153 Water Power Engineering

L-T-P: 3-0-0-3

Theory: 1. Comparison of hydro-power and thermal power, combined power system and grids. 8 Lectures 2. Assessment of available hydropower, necessity of storage and pondage, flow duration curve and power duration curve and their uses 9 Lectures 3. Types of hydropower plant, design of power house structures: intakes, conveyance system, foreway, surge tanks power house, tail race. 15 Lectures 4. Types of turbines and their selection, power duration curve and their uses, water hammer analysis. 10 Lectures Text Book/Reference Books: 1. M. M. Dandekar and K. N. Sharma, Water Power Engg., Vikas Publication House, New Delhi. 2. R. S. Varshney, Hydropower Structures, Nem Chand and Bros., Roorkee.