5CE141 Design of Dams

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

Theory: 1. Gravity dams, Arch dams, and Buttress dams. Application of analogy techniques; 11 Lectures 2. Earthen Dams and Earth-Rock fill dams, Seepage analysis and Stability analysis 10 Lectures 3. Dam ancillary works; Spillways; Classification, design consideration; Contraction joints, treatment of foundations and outlets, 10 Lectures 4. Design of hydropower installation and intake structures. 11 Lectures Text Books: 1. Bharat Singh: Fundamentals of Irrigation Engineering, Nemchand Bros., Roorkee, Uttrakhand. 2. Punamia, B. C., Pande Lal B. B. Irrigation and Water Power Engineering, Laxmi Publication Pvt. Ltd., New Delhi, 1969. 3. Garg S. K., Water Resourse Engineering, Khanna Publication, Nai Sarak, Delhi 1973.

Reference Books: 1. R. K. Linsley and J. L. H. Paulhus, Water Resource Engineering, McGraw Hill Book Co. New York.