

**DEVELOPMENT OF CO-RELATIONSHIP
BETWEEN RAINFALL, RUNOFF, SURFACE
AND GROUNDWATER POTENTIAL
OF KUTCH REGION OF GUJARAT**



**THESIS
SUBMITTED FOR FULFILLMENT OF
REQUIREMENTS FOR THE DEGREE OF**

**DOCTOR OF PHILOSOPHY
IN
CIVIL ENGINEERING**

By
MUJUMDAR SANSKRITI SUHAS

B.E. (Civil), M.E. (Hydraulic Structures)
M.I.E., M.I.A.H., M.I.W.R.S., M.I.W.W.A., M.I.S.T.E, M.I.G.S., M.A.S.C.E

Guided By
PROF. (DR.) A.S.PATEL

Ph.D (Civil)
F.I.E., F.I.A.H., F.I.W.R.S., F.I.W.W.A.
M.I.S.T.E, M.I.G.S., M.A.S.C.E.



**DEPARTMENT OF CIVIL ENGINEERING
FACULTY OF TECHNOLOGY & ENGINEERING
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA**

AUGUST 2010