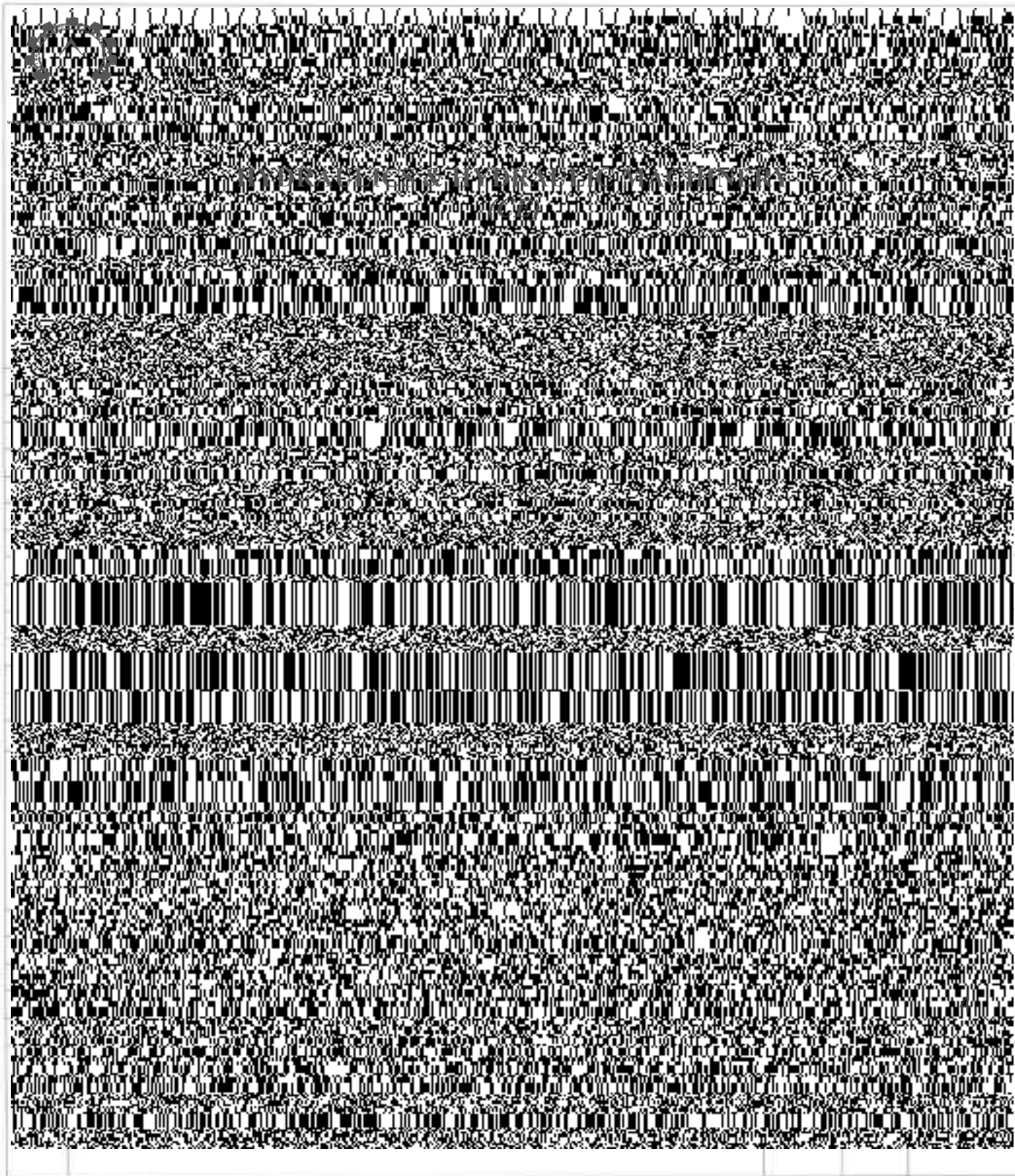




6	Derive the expression for force exerted by the jet on a stationary vertical plate?	10M	CO3	4
	OR			
7	A jet of water of diameter 75 mm moving with a velocity of 25 m/sec strikes a fixed plate in such a way the angle between the jet and the plate is 60°. Calculate the force exerted by the jet on the plate (i) the direction normal to the plate (ii) in the direction of the jet.	10M	CO3	4
8	Describe briefly the function of various main components of Pelton Turbine with neat sketch?	10M	CO4	2
	OR			
9	A Kaplan Turbine working under a head of 20 m develops 11772 KW shaft power. The outer diameter of the runner is 3.5 m and hub diameter are 1.75 m. The guide blade angle at the extreme edge of the runner is 35 degrees. The hydraulic and overall efficiencies of the turbines are 88% and 84% respectively. If the velocity of whirl is 0 at the outlet. Determine:(i) Runner vane angles at inlet and outlet at the extreme edge of the runner. (ii) Speed of the turbine.	10M	CO4	4
10	Define Centrifugal Pump. Explain the main parts of a Centrifugal Pump with a neat sketch?	10M	CO5	4
	OR			
11	Define reciprocating Pump. Sketch a reciprocating pump neatly with parts.	10M	CO5	3