

COURSE TITLE : HYDRAULICS LAB
COURSE CODE : 4018
COURSE CATEGORY : A
PERIODS/WEEK : 3
PERIODS/SEMESTER: 39
CREDITS : 2

TIME SCHEDULE

Module	Topics	Period
1	Experiment to verify Bernoulli's theorem Experiment on venturimeter Experiment on orifice and notches	20
2	Experiment on pipe friction apparatus Experiment on open channel Study on the working of turbines Study on the centrifugal pump, reciprocating pump and hydraulic ram	19
TOTAL		39

COURSE OUTCOME

Sl.	Sub	Student will be able to
1	1	Verify Bernoulli's theorem
	2	Determine coefficient of venturimeter,
	3	Determine hydraulic coefficients of orifice and notches
2	1	Determine the coefficient of friction of pipe
	2	Determine the coefficient of discharge of an open channel
	3	Study the working of turbines
3	1	Study characteristic curves of centrifugal pump and reciprocating pump
	2	Study the working of hydraulic ram

SPEIFIC OUTCOME

1. Verify Bernoulli's theorem
2. a. Determine the coefficient of discharge of orifices and notches
b. Calibrate notches and orifices
3. Determine the coefficient of discharge of Venturimeter
4. a. Determine the Darcy's coefficient of friction for pipes
b. Plot TEL and HEL
5. Determine Chezy's constant for channel.
6. Determine the efficiency of turbines.
7. Draw the characteristics curves of centrifugal pump and reciprocating pump
8. Determine efficiency of hydraulic ram.

COURSE CONTENT

LIST OF EXPERIMENTS

1. Test on Bernoulli's theorem
2. Tests on orifices and notches
3. Test on venturimeters
4. Test on pipe friction apparatus
5. Test on flow through channel
6. Test on turbines.
7. Test on centrifugal pump and reciprocating pump
8. Test on Hydraulic Ram