

GOVT. POLYTECHNIC, NAYAGARH**5TH SEMESTER MECHANICAL ENGINEERING (2023-24)****SUBJECTS – HYDRAULIC MACHINES & INDUSTRIAL FLUID POWER LAB****NAME OF FACULTY- SUCHISMITA BEHERA, PTGF (MECH.ENGG.)**

SL NO.	WEEK	DAY	TOPICS TO BE COVERED
1.	1st	1 st	Performance test on impulse turbine and to find out the efficiency
		2 nd	Performance test on impulse turbine and to find out the efficiency
2.	2nd	1 st	Performance test on impulse turbine and to find out the efficiency
		2 nd	Performance test on Kaplan turbine and to find out the efficiency
3.	3rd	1 st	Performance test on Kaplan turbine and to find out the efficiency
		2 nd	Performance test on Kaplan turbine and to find out the efficiency
4.	4th	1 st	Performance test on Francis turbine and to find out the efficiency
		2 nd	Performance test on Francis turbine and to find out the efficiency
5.	5th	1 st	Performance test on Francis turbine and to find out the efficiency
		2 nd	Performance test on centrifugal pump and to find out the characteristic curves
6.	6th	1 st	Performance test on centrifugal pump and to find out the characteristic curves
		2 nd	Performance test on centrifugal pump and to find out the characteristic curves
7.	7th	1 st	Direct operation of single and double acting pneumatic cylinder.
		2 nd	Direct operation of single and double acting pneumatic cylinder
8.	8th	1 st	Direct operation of single and double acting pneumatic cylinder
		2 nd	Operating double acting pneumatic cylinder with quick exhaust valve
9.	9th	1 st	Operating double acting pneumatic cylinder with quick exhaust valve
		2 nd	Operating double acting pneumatic cylinder with quick exhaust valve
10.	10th	1 st	Speed control double acting pneumatic cylinder using metering in and metering out circuits
		2 nd	Speed control double acting pneumatic cylinder using metering in and metering out circuits

11.	11th	1 st	Speed control double acting pneumatic cylinder using metering in and metering out circuits.
		2 nd	Direct operation of single & double acting hydraulic cylinder
12.	12th	1 st	Direct operation of single & double acting hydraulic cylinder
		2 nd	Direct operation of single & double acting hydraulic cylinder
13.	13th	1 st	Direct operation of hydraulic motor
		2 nd	Direct operation of hydraulic motor
14.	14th	1 st	Direct operation of hydraulic motor
		2 nd	Speed control double acting hydraulic cylinder using metering in & metering out circuits
15.	15th	1 st	Speed control double acting hydraulic cylinder using metering in & metering out circuits
		2 nd	Speed control double acting hydraulic cylinder using metering in & metering out circuits