

LESSON PLAN

DEPARTMENT OF MECHANICAL ENGINEERING, ITT, CHOUDWAR

SUBJECT: HYDRAULIC MACHINES & INDUSTRIAL FLUID POWER LAB

Periods: 4 per week for a group

No. of weeks: 15

SEMESTER: 5th

NAME OF FACULTY: Manoranjan Panda, Instructor (Mech)

Class Day (2hrs./day)	Week	Theory / Practical Topics
1 st	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
1 st	2 nd	Performance test on impulse turbine and to find out the efficiency
2 nd		Performance test on Kaplan turbine and to find out the efficiency
1 st	3 rd	Performance test on Kaplan turbine and to find out the efficiency
2 nd		Performance test on Kaplan turbine and to find out the efficiency
1 st	4 th	Performance test on Francis turbine and to find out the efficiency
2 nd		Performance test on Francis turbine and to find out the efficiency
1 st	5 th	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
1 st	6 th	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
1 st	7 th	Direct operation of single & double acting pneumatic cylinder.
2 nd		Direct operation of single & double acting pneumatic cylinder.
1 st	8 th	Direct operation of single & double acting pneumatic cylinder.
2 nd		Operating double acting pneumatic cylinder with quick exhaust valve
1 st	9 th	Operating double acting pneumatic cylinder with quick exhaust valve
2 nd		Operating double acting pneumatic cylinder with quick exhaust valve
1 st	10 th	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.
1 st	11 th	Speed control double acting pneumatic cylinder using metering in and metering out circuits.

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

Manda

Sign. of Faculty