

# LESSON PLAN

GOVT. POLYTECHNIC, NAYAGARH

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT: HM&IFP LAB

Periods:4P/WEEK

SEMESTER:5<sup>th</sup>

NAME OF FACULTY: Mr. Himanshu Patra, Lect. (GF)

From date: 01/07/2024

To Date: 08/11/2024

No. of weeks: 15

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



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

Himanshu Purohit  
 A.E. (Mech)