

# KIIT POLYTECHNIC, BHUBANESWAR

## LESSON PLAN

### Session (2021-2022)

|   |   |  |
|---|---|--|
| <b>Discipline:</b><br>Mechanical  | <b>Semester:</b><br>5 <sup>th</sup> , Winter/2021 | <b>Name of the Teaching Faculty:</b><br>Prasant Kumar Patra<br>Lecturer<br><b>Email ID:</b> pkpatrafme@kp.kiit.ac.in |
| <b>Subject:</b><br>Hydraulic Machine & Industrial Fluid<br>Power Lab, Practical-2 | <b>No. of Days/Week:</b> 04<br>(2 periods / Day)  | <b>Start Date:</b> 01/10/2021<br><b>End Date:</b> 31/01/2022   |
| <i>Experiments will be performed in small groups of 5 to 6 students</i>           |   |  |

| Week             | Class Day | Practical Topics  |
|------------------|-----------|---|
| 1 <sup>st</sup>  | 1st       | Laboratory Visit and familiarize with laboratory. Understanding Laboratory instructions and safety rules. |
|                  | 2nd       | Experiment-01: Study of Pelton Wheel turbine.   |
| 2 <sup>nd</sup>  | 1st       | Experiment-01: Study of Pelton Wheel turbine.   |
|                  | 2nd       | Viva & Record Checking  |
| 3 <sup>rd</sup>  | 1st       | Experiment-02: Performance test on Pelton turbine to find out its efficiency.                             |
|                  | 2nd       | Experiment-02: Performance test on Pelton turbine to find out its efficiency.                             |
| 4 <sup>th</sup>  | 1st       | Viva & Record Checking  |
|                  | 2nd       | Experiment-03: Study of Francis turbine.  |
| 5 <sup>th</sup>  | 1st       | Experiment-03: Study of Francis turbine.  |
|                  | 2nd       | Viva & Record Checking  |
| 6 <sup>th</sup>  | 1st       | Experiment-04: Performance test on Francis turbine to find out its efficiency.                            |
|                  | 2nd       | Experiment-04: Performance test on Francis turbine to find out its efficiency.                            |
| 7 <sup>th</sup>  | 1st       | Viva & Record Checking  |
|                  | 2nd       | Experiment-05: Study of Kaplan turbine.   |
| 8 <sup>th</sup>  | 1st       | Experiment-05: Study of Kaplan turbine.   |
|                  | 2nd       | Viva & Record Checking  |
| 9 <sup>th</sup>  | 1st       | Experiment-06: Performance test on Kaplan turbine to find out its efficiency.                             |
|                  | 2nd       | Experiment-06: Performance test on Kaplan turbine to find out its efficiency.                             |
| 10 <sup>th</sup> | 1st       | Viva & Record Checking  |
|                  | 2nd       | Experiment-07: Performance test on Centrifugal pump to find out its efficiency.                           |
| 11 <sup>th</sup> | 1st       | Experiment-07: Performance test on Centrifugal pump to find out its efficiency.                           |
|                  | 2nd       | Viva & Record Checking  |
| 12 <sup>th</sup> | 1st       | Repeat Experiment-1&2   |
|                  | 2nd       | Repeat Experiment-3&4   |

|                  |     |                                      |
|------------------|-----|--------------------------------------|
| 13 <sup>th</sup> | 1st | Repeat Experiment-5&6                |
|                  | 2nd | Repeat Experiment-7                  |
| 14 <sup>th</sup> | 1st | Viva & Record Checking (Defaulter)   |
|                  | 2nd | Viva, Record submission & Evaluation |
| 15 <sup>th</sup> | 1st | Practical Test.                      |
|                  | 2nd | Practical Test.                      |