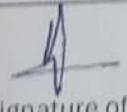


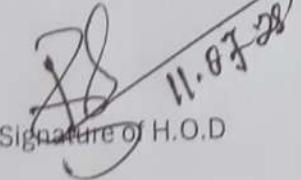
**PNS SCHOOL OF ENGG. & TECH., MARSHAGHAI**

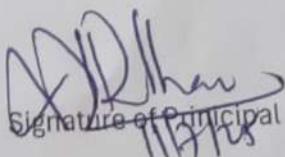
**DEPARTMENT OF MECHANICAL ENGINEERING LESSON PLAN**

|                              |  |  |
|------------------------------|--|--|
| BRANCH :<br>MECHANICAL       | SEMESTER : 5TH                           | NAME OF THE TEACHING FACULTY :<br><b>MR.PRAFULLA KUMAR NAYAK</b>                       |
| SUBJECT: (PR-2) HM & IFM Lab | NO. OF DAYS PER WEEK CLASS ALLOTTED : 04 | SEMESTER FROM DATE: 14.07.2025 TO 15.11.2025 WEEKS:12                                  |
| WEEK                         | CLASS DAY                                | LAB EXPERIMENTS  |
| 1st                          | 1st                                      | Performance test on impulse turbine and to find out the efficiency (GR -A)             |
|                              | 2nd                                      | Performance test on impulse turbine and to find out the efficiency (GR -B)             |
|                              | 3rd                                      | Record Verification (GR -A)  |
|                              | 4th                                      | Record Verification (GR -B)  |
| 2nd                          | 1st                                      | Performance test on kaplan turbine and to find out the efficiency (GR -A)              |
|                              | 2nd                                      | Performance test on Kaplan turbine and to find out the efficiency (GR -B)              |
|                              | 3rd                                      | Record Verification (GR -A)  |
|                              | 4th                                      | Record Verification (GR -B)  |
| 3rd                          | 1st                                      | Performance test on Francis turbine and to find out the efficiency (GR -A)             |
|                              | 2nd                                      | Performance test on Francis turbine and to find out the efficiency (GR -B)             |
|                              | 3rd                                      | Record Verification (GR -A)  |
|                              | 4th                                      | Record Verification (GR -B)  |
| 4th                          | 1st                                      | Performance test on centrifugal pump and to find out the characteristic curves (GR -A) |
|                              | 2nd                                      | Performance test on centrifugal pump and to find out the characteristic curves (GR -B) |
|                              | 3rd                                      | Record Verification (GR -A)  |
|                              | 4th                                      | Record Verification (GR -B)  |
| 5th                          | 1st                                      | Direct operation of single & double acting pneumatic cylinder (GR -A)                  |
|                              | 2nd                                      | Direct operation of single & double acting pneumatic cylinder                          |
|                              | 3rd                                      | Record Verification (GR -A)  |
|                              | 4th                                      | Record Verification (GR -B)  |
| 6th                          | 1st                                      | Operating double acting pneumatic cylinder with quick exhaust valve (GR -A)            |
|                              | 2nd                                      | Operating double acting pneumatic cylinder with quick exhaust valve                    |

|      |     |  |
|------|-----|--|
| 7th  | 1st | Record Verification (GR -A)  |
|      | 2nd | Record Verification (GR -B)  |
|      | 3rd | Speed control double acting pneumatic cylinder using metering in and metering out circuits (GR -A) |
|      | 4th | Speed control double acting pneumatic cylinder using metering in and metering out circuits (GR -B) |
| 8th  | 1st | Record Verification (GR -A)  |
|      | 2nd | Record Verification (GR -B)  |
|      | 3rd | Direct operation of single & double acting hydraulic cylinder (GR -A)                              |
|      | 4th | Direct operation of single & double acting hydraulic cylinder (GR -B)                              |
| 9th  | 1st | Record Verification (GR -A)  |
|      | 2nd | Record Verification (GR -B)  |
|      | 3rd | Direct operation of hydraulic motor (GR -A)  |
|      | 4th | Direct operation of hydraulic motor (GR -B)  |
| 10th | 1st | Record Verification (GR -A)  |
|      | 2nd | Record Verification (GR -B)  |
|      | 3rd | Speed control double acting hydraulic cylinder using metering in circuits.(GR -A)                  |
|      | 4th | Speed control double acting hydraulic cylinder using metering in circuits. (GR -B)                 |
| 11th | 1st | Speed control double acting hydraulic cylinder using metering out circuits (GR -A)                 |
|      | 2nd | Speed control double acting hydraulic cylinder using metering out circuits (GR -B)                 |
|      | 3rd | Record Verification (GR -A)  |
|      | 4th | Record Verification (GR -B)  |
| 12th | 1st | Record Verification (GR -A)  |
|      | 2nd | Record Verification (GR -B)  |
|      | 3rd | Record Verification (GR -A)  |
|      | 4th | Record Verification (GR -B)  |

  
Signature of  
Demonstrator

  
11.07.28  
Signature of H.O.D.

  
Signature of Principal