**UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA**

**Academic Lesson Plan for Winter semester- 2022**

**Name of the teaching faculty: Er.RajendraMohanty Department: Mechanical Engineering**

**Semester: 3rdSubject: MECHANICAL ENGINEERING LABORATORY**

**No. of periods per week:3 Total Periods: 45**

**End semester exam: 50 Sessional: 25**

**Total Marks:75**

| Sl. No. | Week | Period | Topic to be covered |
|---|---|---|---|
| 1. | 1st | 1st | Determination of M.A.,V.R. and efficiency of Screw Jack |
| 2. | | 2nd | Do |
| 3. | | 3rd | Do |
| 4. | | 4th | Determination of Young's modulus by Searle's Apparatus |
| 5. | 2nd | 1st | Do |
| 6. | | 2nd | Do |
| 7. | | 3rd | Study of Universal Testing Machine and |
| 8. | | 4th | Do |
| 9. | 3rd | 1st | Do |
| 10. | | 2nd | Study of Cochran Boiler |
| 11. | | 3rd | Do |
| 12. | | 4th | Do |
| 13. | 4th | 1st | Study and demonstration of Stream Engine |
| 14. | | 2nd | Do |
| 15. | | 3rd | Do |
| 16. | | 4th | Study and demonstration of Diesel Engine |
| 17. | 5th | 1st | Do |
| 18. | | 2nd | Do |
| 19. | | 3rd | Study and demonstration of Petrol Engine |
| 20. | | 4th | Do |
| 21. | 6th | 1st | Do |
| 22. | | 2nd | Model study of Centrifugal pumps, |
| 23. | | 3rd | Do |
| 24. | | 4th | Do |
| 25. | 7th | 1st | Francis Turbine, Kaplan turbine and Pelton wheel. |
| 26. | | 2nd | Do |
| 27. | | 3rd | Do |

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| 28. | | 4th | Study of pressure measuring devices |
| 29. | 8th | 1st | Do |
| 30. | | 2nd | Do |
| 31. | | 3rd | Study of venturi-meter |
| 32. | | 4th | Do |
| 33. | 9th | 1st | Do |
| 34. | | 2nd | Verification of Bernouli's Theorem |
| 35. | | 3rd | Do |
| 36. | | 4th | Do |
| 37. | 10th | 1st | Determination of Bending stress in beam using strain gauge |
| 38. | | 2nd | Do |
| 39. | | 3rd | Do |
| 40. | | 4th | Determination of M.A.,V.R. and efficiency of wheel train |
| 41. | 11th | 1st | Do |
| 42. | | 2nd | Do |
| 43. | | 3rd | Determination of friction co-efficient of bearing |
| 44. | | 4th | Do |
| 45. | 12th | 1st | Do |

**The lesson plan prepared by the concerned faculty**

**Er.RajendraMohanty**

**PTGF, MECHANICAL DEPARTMENT**