#### **ASSIGNMENT-3**

#### **BRANCH**- MECHANICAL ENGINEERING

### **SUBJECT-** APPLIED MECHANICS

#### **CHAPTER-**SIMPLE MACHINES

## SHORT ANSWER TYPE QUESTIONS

- Q1. Define Simple Machine
- Q2. Define Compound Machine
- Q3. Define Load
- Q4. Define Effort
- Q5. Define Mechanical Advantage
- Q6. Define Velocity Ratio
- Q7. Define Efficiency of a Machine
- Q8. Define Ideal Machine
- Q9. Define Reversible Machine
- Q10. Define Irreversible (Self Locking) Machine

# LONG ANSWER TYPE QUESTIONS

- Q11. Explain the difference between simple machine and compound machine
- Q12. Give relationship between mechanical advantage, velocity ratio and efficiency of a machine
- Q13. Give advantages of a machine
- Q14. Explain law of machine in detail

- Q15. Explain Reversible Machine in detail
- Q16. Explain Irreversible Machine (Self Locking) in detail
- Q17. Give expression for effort lost in friction
- Q18. Give expression for load lost in friction
- Q19. Explain how maximum mechanical advantage and maximum efficiency are determined
- Q20. Explain various system of pulley in detail
- Q21. Explain the working of simple screw jack
- Q22. Explain the working of worm and worm wheel
- Q23. Explain the working of single and double winch crab
- Q24. Explain the working of Weston's Differential Pulley Block