## **Management Science Lab**

(B. Tech. – Production Engineering)

## List of Experiments for Management Science Lab

- 1. Operation simulation of a serial supply chain using Supply Chain Role Play Game (SCRPG) software package
- 2. Performance analysis of a four-echelon supply chain under order up to level inventory policy using Supply Chain Inventory Policy Analyser (SCIPA) software packages
- 3. Problem formulation, and solution & sensitivity analysis using LINGO
- 4. Simulation exercise using ARENA and WITNESS
- 5. Construction of X-bar and R Chart
- 6. Preparation of material plan and schedule on rolling horizon basis for components of an end item using MNMRP package
- 7. Design of process layout for the given problem
- 8. Preparation of assembly chart and product structure, and MRP planning
- 9. Learning curve