Unit 1

The role of mechanization and its relationship to productivity, employment, social and Technological change;

Unit II

performance and power analysis; cost analysis of machinery: fixed cost and variable costs, effect of inflation on cost;

Unit III

selection of optimum machinery and Replacement criteria; Break-even analysis, reliability and cash flow problems;

Unit IV

mechanization Planning; case studies of agricultural mechanization in India.

Unit V

Human Engineering aspects and gender studies.

TEXT BOOKS:

- 1. Barger, E.L., Liledahl, J.B., Carleton, W.M. and Mckibben, E.G. (1978). *Tractor and their power units*. Wiley Eastern pvt. Ltd, New York
- 2. Donnel Hunt. *Farm Machinery and management*. Iowa State University Press, Ames, USA.
- 3. Kepner, R.A., Bainer Roy, and Barges, E.C. (1978). *Principals of Farm Machinery*, . CBS Publishers and Distributors, Delhi-17

REFERENCE BOOKS:

- 1. Mehta M.L. et al. (1995). *Testing and Evaluation of Agricultural Technology* . Information Centre, Ludhiana, India
- 2. Radhey Lal and Datta, A.C. (1978). *Problems in Agricultural Engineering*. Sathya Prakashan, Allahabad
- 3. RNAM . (1955). Test codes and Procedure for farm machinery