## SUBJECT NO-AG31002, SUBJECT NAME- TRACTOR

LTP- 3-0-0,CRD- 3

## SYLLABUS :-

Introduction: Types of farm tractors. Trends in tractor design. Engine
Performance: Testing and evaluation of IC engines. Performance characteristics
of SI and CI engines. Governors and their controls. Tractor Transmission:
Tractor clutches and brakes. Power transmission system and final drives.
Traction Theory: Different types of traction devices. Mechanics of traction and
towed wheels. Evaluating the performance of traction devices. Tractor Chassis:
Mechanics of tractor chassis. Lateral and longitudinal stability. Weight
transfer. Steering system. Hitch Systems: Three point linkage geometry. Free
link and restrained link mechanisms. Automatic position and draft control
systems used in modern tractors. Tractor Test and Performance: Drawbar
performance of tractors. Tractor power cost estimation. Test standards. Tractor
ergonomics: Human factors in the design of tractor seat and different controls.