

SUBJECT NO-AG60109, SUBJECT NAME- SOIL DYNAMICS IN TILLAGE AND TRACTION

LTP- 3-0-0,CRD- 3

SYLLABUS :-

Measurement of dynamic properties of soil in compression, tension, shear, impact, friction and adhesion. Soil strength. Mechanics of rigid, rotary and oscillating tillage tools. Design and performance of various tillage tools. Tyre size, load and pressure relationship. Mechanics and design of traction and transport devices. Theories for predicting thrust and rolling resistance. Measurement and characterization of terrain response. Methods for parametric analysis of wheeled vehicle performance. Analysis of tracked vehicle performance. Traction improvement. Handling characteristics of off-road vehicle.