AMAG 27-MECHANICS OF TILLAGE AND TRACTION

UNIT I
Introduction to mechanics of tillage tools, engineering properties of soil, principles and concepts, stress strain relationship.

UNIT II
Design of tillage tools principles of soil cutting, design equation, force analysis, application of dimensional analysis in soil dynamics performance of tillage tools.

UNIT III
Introduction to traction and mechanics, off road traction and mobility, traction model, traction improvement, traction prediction.

UNIT IV
Tyre size, tyre lug geometry and their effects, tyre testing, soil compaction and plant growth.

UNIT V
Variability and geo statistic, application of GIS in soil dynamics.

TEXT BOOKS:

REFERENCE BOOKS: