



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



DEPARTMENT OF CIVIL ENGINEERING

19CEB301- SOIL MECHANICS

III YEAR V SEM

UNIT 1 – INTRODUCTION

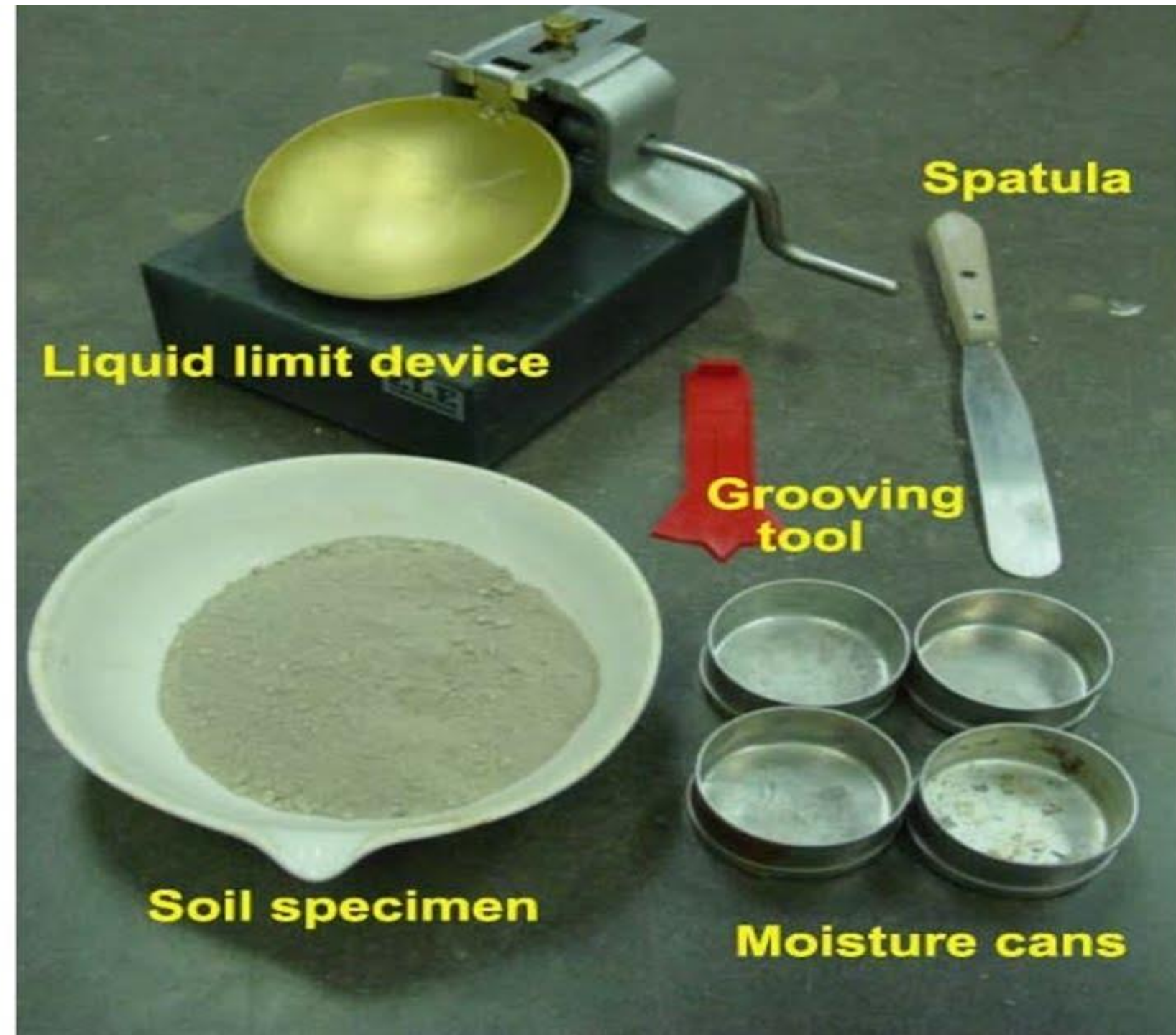
Topic 3 : Atterberg Limits



Atterberg Limits

Liquid Limit, Plastic Limit,
and Plasticity Index
of Soils

ASTM D4318





PROPERTIES OF SOIL



INDEX PROPERTIES

- a) Specific gravity
- b) Particle Size Analysis
 - i) Sieve Analysis (Dry Method)
 - ii) Hydrometer (Wet Method)
- c) Atterberg's Limits
 - i) Liquid Limit
 - ii) Plastic Limit
 - iii) Shrinkage Limit
- d) Free swell index



PROPERTIES OF SOIL



ENGINEERING PROPERTIES

- a) Shear strength
- b) Permeability
- d) Consolidation





ASSESSMENT



- ❖ What are index properties of soil ?
- ❖ What are engineering properties of soil ?
- ❖ Define shear strength of soil



REFERENCES



- ❖ Coduto, D.P., “Geotechnical Engineering Principles and Practices”, Prentice Hall of India Private Limited, New Delhi, 2002
- ❖ McCarthy D.F., “Essentials of Soil Mechanics and Foundations Basic Geotechniques”, Sixth Edition, Prentice-Hall, New Jersey, 2002
- ❖ Das, B.M, “Principles of Geotechnical Engineering”, (fifth edition), Thomas Books/ cole, 2002



THANK YOU