MECHANICALLY STABILIZED EARTH

Aim: To find the strength of the soil block mechanically stabilized using reinforcements.

Description: Mechanically stabilized earth or MSE is soil constructed with artificial reinforcing. It can be used for retaining walls, bridge abutments, seawalls, and dikes. MSE retains the soil under crest loads. The reinforcement improves the earth by increasing the bearing capacity of the soil and reduces the settlement. It also reduces the liquefaction behaviour of the soil. The construction of reinforced earth structure has become wide spread in Geotechnical engineering practice in the last two decades owing to their ease of construction and economy compared to those of conventional methods.

Procedure:

There will be two rounds:-
Round 1 – There will be a Preliminary Quiz. Only 5 teams will qualify to the next round.
Round 2 – This round comprises of model making.

Problem Statement:

1. Each Team will have two members.
2. Each team will be given a mould (Cubical), reinforcement material, water and soil using which they will build a model of MSE.
3. Participants can choose the **type** and the **number** of reinforcement material from the various material provided to them.
4. Time given to make this model will be 30 minutes.

Judgment:

A compression test will be done on every model in compression testing machine. Most economic model will win.