VISUAL SOIL CLSSIFICATION

THEORY:

1. Distinctive dark colour indicates organic matter.
2. Fresh wet organic soils usually have a distinctive odour of decomposed organic matter. If odour is faint, heat the sample slightly. This intensifies the odour.
3. Describe appearance of fresh fracture of intact sample (granular, smooth-dull, and smooth-glossy). Rub small quantity of soil between fingers and describe sensation (Floury smooth, gritty, sharp).
4. Take a small representative sample in the form of a soil pat of the size of about 5 cc and add enough water to nearly saturate it. Place the pat in the open palm of one hand and shake horizontally striking vigorously against the other hand several times. Squeeze the pat between the fingers. The appearance and disappearance of the water with shaking and squeezing is referred to as reaction* intensity of phenomena observed.
5. Describe shape (angular, sub-angular, rounded, and well rounded). If mica is present indicate mica content (slightly, moderate or highly micaceous). You may also ask for magnifying glass for observations.
6. Take a small quantity of soil and add enough water until it has the consistency of a putty. Make a ball out of it and allow it to dry. Note results as severe, mild or none depending on intensity of cracking observed.

* Describe the results as quick, slow or none depending on the case.

Property (Dry/wet)		Colour	Odour	Texture (appearance/shape)	Grain Properties (coarse/fine)	Volume Change (expands with water)	Dilatancy	Type of Soil
A	Predicted							
	Correct							
B	Predicted							
	Correct							
C	Predicted							
	Correct							
D	Predicted							
	Correct							
E	Predicted							
	Correct							
F	Predicted							
	Correct							
G	Predicted							
	Correct							
H	Predicted							
	Correct							
I	Predicted							
	Correct							
J	Predicted							
	Correct							
K	Predicted							
	Correct							

Property (Dry/wet)		Colour	Odour	Texture (appearance/shape)	Grain Properties (coarse/fine)	Volume Change (expands with water)	Dilatancy	Type of Soil
L	Predicted							
	Correct							
M	Predicted							
	Correct							
N	Predicted							
	Correct							
O	Predicted							
	Correct							
P	Predicted							
	Correct							

Remarks:

1. Colour: Red, Yellow, Brown, Reddish Brown, Sparkling White etc.
2. Odour: Odour (Pungent, Rotten egg etc.) or Odourless
3. Texture: Shape (Rounded, Subrounded, Angular, Subangular, Flaky/Platy); Surface Texture (Rough, Smooth, Gritty); Appearance (Glossy, Dull)
4. Grain Properties (Coarse, Fine or Both Coarse and Fine)
5. Volume Change: No change, Change, Huge Change
6. Dilatancy: Slow, Intermediate or Fast
7. Type of Soil: Sand, Clay, Silt, Clayey silt, Clayey sand, Gravelly Clay, Gravel, Micaceous soil, Mica, Fly ash etc.