|                               | Performed? | Use of graph  | Studied? | Description   |      |
|-------------------------------|------------|---|----------|---|------|
| Comapaction                   | P          | Y(b/w wc and dry density)   | Y        | maximum point in the graph will provide you with maximum dry density and optimal water content  | Easy |
| Direct Shear Test             | Р          | Y(b/w normal stress and shear stress)                             | Y        | After plotting the best-fit line, the slope in degree will provide the angle of shearing resistance and the intercept will provide soil cohesion.   |      |
| Field Density                 | Р          | N   | Υ        |   | Easy |
| Permeability                  | P          | N   | Υ        | Calculate the hydraulic gradient carefully for constant head and in falling head, remember that sqrt of initial and final h reading gives the middle value for which the time duration is same from initial to middle and middle to final. L is the length of mold = 115mm and h is head loss from the soil sample. |      |
| Seive Analysis and Hydrometer | Р          | Y(Calibration graph not req, Sieve analysis, hydrometer analysis) | Y        | remember meniscus correction is positive and dispersing agent correction is neg, temp depends refer to slides.  |      |
| Consolidation                 | NP         | Y(between time and deflection, void ratio and pressure)           | Y        | Taylor and Casagrande method  |      |
| UCS                           | NP         | N   | Υ        |   | Easy |
| Relative Density and SG       | NP         | N   | Υ        |   | Easy |
| Consistency Limits            | NP         |   |          |   |      |