

## **VERBAL QUESTIONS FOR FULL SOILS**

### **R-58 (DRY PERPARATION OF DISTURBED SOIL AND SOIL AGGREGATES)**

1. What are the two ways to dry your soil sample and the temperature? Air dried or oven dry at a temp. of 60°C (140°F)
2. After pulverizing the soil aggregates what sieve or sieves should be used? No. 10 or the No 4 and 10 depends on the method used.

### **T-90 (DETERMINING THE PLASTIC LIMIT AND PLASTICITY INDEX)**

1. What size sieve is used to determine the plastic limit? Minus No. 40 (0.425-mm)
2. The soil mass is rolled how thick? 3mm diameter.
3. Approximately how many strokes per minute should the sample be rolled at? 80 to 90 strokes per minute.

### **T-89 (DETERMINING THE LIQUID LIMIT OF SOILS)**

1. What size sieve is used to determine the liquid limit? Minus No. 40 (0.425-mm)
2. The sample should be spread in the cup with a spatula to level and trimmed to what depth? 10mm at the point of maximum thickness.
3. How many strokes of the spatula should be used? As few as possible.
4. Turn the crank at approximately how many revolutions per second? 2 revolutions per second.
5. The two sides of the sample come into contact at the bottom of the groove along a distance of what? 13mm.

### **T-99 (MOISTURE DENSITY OF SOIL 5.5LBS RAMMER)**

1. What size sieve is used to determine the moisture density? Minus No. ¾" (19.0-mm) or No. 4
2. At what temperature should you dry your moisture samples at? 110±5°C (230±9°F)

**T-180 (MOISTURE DENSITY OF SOIL 10LBS RAMMER)**

1. What size sieve is used to determine the moisture density? Minus No. 3/4" (19.0-mm) or No. 4
2. What size of rammer and drop should be used for T-180? (10 lbs rammer and a 18" drop
3. What size mold should be used for T-180 Method D? 6" mold
4. In how many approximately equal layers? 5
5. Compact each layer to how many uniformly distributed blows? 56
6. The base shall remain stationary during the compaction process with a mass not less than what? 200lbs
7. At what temperature should you dry your moisture samples at? 110±5°C (230±9°F)

**T-85 (SPECIFIC GRAVITY AND ABSORPTION)**

1. Dry the sample to a constant mass at a temperature of? (110± 5°C) 230± 9°F
2. How long should the aggregates be immerse in water at room temperature? 15 to 19 hours
3. If the test sample dries past the SSD condition what should you do? Immerse in water for 30 minutes and then resume the process of surface-drying.
4. After determining the mass, immediately place the saturated surface-dry test sample in the sample container and determine its mass at what temperature? (23± 1.7°C) 73.4± 3°F

**R 76 (REDUCING FIELD SAMPLES)**

1. How many splitter openings are required for coarse aggregates? No less than 8 and how many splitter openings are required for fine aggregates? No less than 12, and for coarse the openings shall be approximately how much large than the largest particle? 50%