**Example 17.1:** The wet weight of a specimen of soil is 340g and the dried weight is 230g. The volume of the soil before drying is 210 cc. If the specific gravity of the soil particles is 2.75, determine void ratio, porosity, degree of saturation, and dry density.

**Example 17.2:** The moisture content of a specimen of soil is 26%, the bulk density is 116 Ib/ft3. If the specific gravity of the soil particles is 2.76, determine the void ratio and the degree of saturation.

**Example 17.3:** The following data were obtained for a soil sample.

|  |  |  |
| --- | --- | --- |
| **Mechanical Analysis** | | |
| Sieve No. | Percent Finer | Plasticity Tests |
| 4 | 97 | LL=48%  PL=26% |
| 10 | 93 |
| 40 | 88 |
| 100 | 78 |
| 200 | 70 |

Using the AASHTO method for classifying soils, determine the classification of the soil and state whether this material is suitable in its natural state for use as a subbase material.