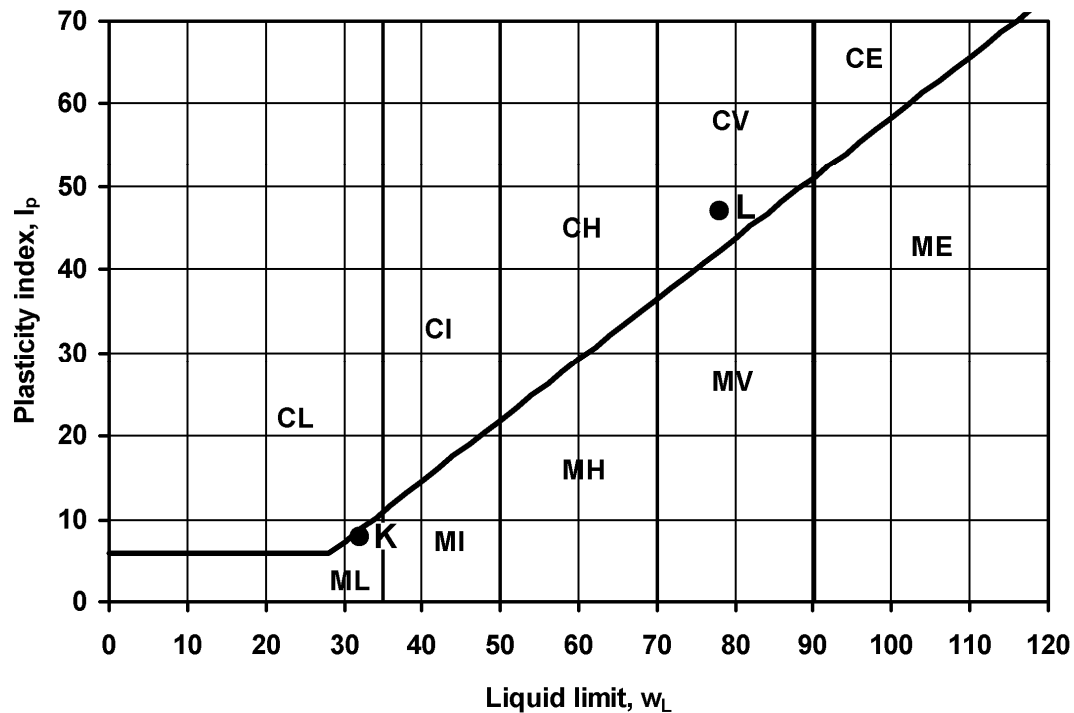
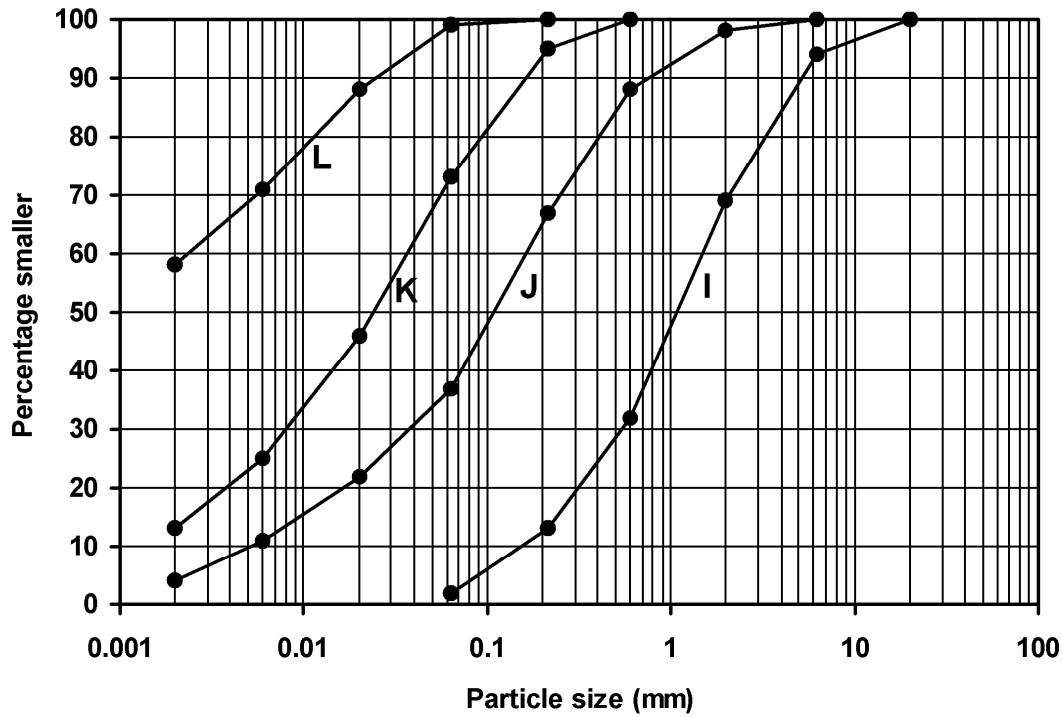


Working:

Output :



	Craig's Soil Mechanics: Ninth Edition	
	Chapter 1: Basic characteristics of soils	Author: JAK, RFC
	Problem No. : 1.1	Page No. : 2 of 2

Working:	Output :
Soil I consists of 98% coarse material (31% gravel size; 67% sand size) and 2% fines. It is classified as SW: well-graded gravelly SAND or, in greater detail, well-graded slightly silty very gravelly SAND.	SW
Soil J consists of 63% coarse material (2% gravel size; 61% sand size) and 37% non-plastic fines (i.e. between 35 and 65% fines); therefore, the soil is classified as MS: sandy SILT.	MS
Soil K consists of 73% fine material (i.e. between 65 and 100% fines) and 27% sand size. The liquid limit is 32 and the plasticity index is 8 (i.e. $32 - 24$), plotting marginally below the A-line in the ML zone on the plasticity chart (Figure 1.12). Thus the classification is ML: SILT (M-SOIL) of low plasticity.	ML
Soil L consists of 99% fine material (58% clay size; 47% silt size). The liquid limit is 78 and the plasticity index is 47 (i.e. $78 - 31$), plotting above the A-line in the CV zone on the plasticity chart (Figure 1.12). Thus the classification is CV: CLAY of very high plasticity.	CV