Department of Civil Engineering, MIST
Geotechnical Engineering Laboratory

MEASUREMENT OF SPECIFIC GRAVITY OF SOIL SOLIDS (ASTM D-854)

Project:				Location:	
BH no:		Depth (m):		Soil Type:	

Name of Student:				Student ID:	
Level/Term:		Section:		Group No:	
Course No:		Date of Test:			

DATA SHEET

Specimen No:			
Mass of flask (gm)			
Mass of flask + Mass of dry soil (gm)			
Mass of dry soil, M_o (gm)			
Mass of flask filled with water, M_a (gm)			
Mass of flask filled with soil and water, M_b (gm)			
Specific gravity of soil solids, G_s			
Room temperature, T (^{0}C)			
Specific gravity of water at 20^{o}C, G_{w20}			
Specific gravity of water at T^{o}C, G_{wT}			
Correction factor, K			
Specific gravity of soil solids at 20^{o}C, G_{s20}			

Calculation: $G_s = \frac{M_o}{M_o + (M_a - M_b)} \times 100\%$

$G_{20} = G_s K$

Signature of Teacher: