Princess Sumaya جامعـــة
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PHYSICS LAB

(20147)

Experiment No.3

Basic Measurements II
Spherometer

Name: …….	**Reg. No. ( )**
Partner name:……	**Class ( )**
Date / / 2021	**Mark ( )**

Experiment 3
Basic Measurements II- Spherometer

1. Objectives:

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2. Data:

A. Determining the zero of the spherometer

a) Complete the following table

Table 1: The plane surface.

Term		Main Scale mm	Vernier Scale mm	Total reading mm (b)	Mean Value mm (b) (zero of the spherometer)
Plane surface	1				
	2				

B. Finding the radius of the Spherical surface R

a) Complete the following table.

Table 2 Spherical surface.

Item	Case	Vertical reading V (mm)	Circular reading C (mm)	Count value V+C (mm)	a = (V+C) –b (mm)	Leg distance S (mm)	R (mm)	Average R (mm)
Large Surface	Concave							
	Convex							
Small Surface	Concave							
	Convex							

C. Finding the thickness of a slide

a) Complete the following table.

Table 3 Thickness of a slide

Term	**Main Scale mm**	**Vernier Scale mm**	**Total reading mm**	**Thickness (a) = total reading – b mm**
Slide				

b. Calculate the percentage difference in the thickness of the slide in table 4.

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