

(4)

(b) To study the relation between the length of a given wire and tension for constant frequency using sonometer.

B6. To find the speed of sound in air at room temperature using a resonance tube by two resonance positions.

B7. To find the value of v for different values of u in case of a concave mirror and to find the focal length.

B8. To find the focal length of a convex lens by plotting graphs between u & v or between $\frac{1}{u}$ and $\frac{1}{v}$.

B9. To determine the angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.

B10. To determine refractive index of a glass slab using a travelling microscope.

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2022

PHYSICS

(Practical)

Full Marks : 30

Time : 4 hours

EXPERIMENTS

SECTION – A

A1. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.

A2. To measure diameter of a given wire and thickness of a given sheet using screw gauge.

A3. To determine volume of an irregular lamina using screw gauge.

(2)

- A4.** To determine radius of curvature of a given spherical surface by a spherometer.
- A5.** To determine the mass of two different objects using a beam balance.
- A6.** To find the weight of a given body using parallelogram law of vectors.
- A7.** Using a simple pendulum, plot its $L-T^2$ graph and use it to find the effective length of second's pendulum.
- A8.** To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.
- A9.** To study the relationship between force of limiting friction and normal reaction and to find the coefficient of friction between a block and a horizontal surface.

(3)

- A10.** To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with an angle of inclination θ by plotting graph between force and $\sin \theta$.

SECTION – B

- B1.** To determine Young's modulus of elasticity of the material of a given wire.
- B2.** To determine the surface tension of water by capillary rise method.
- B3.** To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.
- B4.** To determine specific heat capacity of a given solid by method of mixtures.
- B5.** (a) To study the relation between frequency and length of a given wire under constant tension using sonometer.