

CLASS –XI PHYSICS
WINTER VACATION –HOMEWORK:2024-25

Please complete any **one** of the investigatory projects given below and submit the project.

1. To investigate whether the energy of a simple pendulum is conserved
2. To determine the radius of gyration about the centre of mass of a metre scale used as a bar pendulum
3. To investigate changes in the velocity of a body under the action of a constant force and to determine its acceleration
4. To compare the effectiveness of different materials as insulators of heat
5. To compare the effectiveness of different materials as absorbers of sound
6. To compare the Young's modulus of elasticity of different specimen of rubber and compare them by drawing their elastic hysteresis curve
7. To study the collision of two balls in two-dimensions
8. To study Fortin's Barometer and use it to measure the atmospheric pressure
9. To study of the spring constant of a helical spring from its load-extension graph
10. To study the effect of nature of surface on emission and absorption of radiation
11. To study the conservation of energy with a 0.2 pendulum