



DELHI PUBLIC SCHOOL(JOKA) SOUTH KOLKATA
SESSION: 2019 -2020
CLASS – XI

PHYSICS

WEEKLY TEST-I

Theory:

1. **Mathematical Tools**
2. **Unit and Measurements**
3. **Motion in a straight line**
4. **Motion in a plane**
5. **Laws of Motion**

Practicals:

1. To measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.
2. To measure diameter of a given wire using screw gauge.
3. To determine radius of curvature of a given spherical surface by a spherometer.
4. To determine the mass of two different objects using a beam balance.
5. To find the weight of a given body using parallelogram law of vectors.

MIDTERM EXAMINATION

(Theory = 70, Practical = 30, Total=100)

Theory:

Previous Syllabus

6. **Work, Energy and Power**
7. **Motion of System of Particles and Rigid Body**
8. **Gravitation**

Practicals :

Previous Experiments

6. Using a simple pendulum, plot L-T and L-T² graphs. Hence find the effective length of second's pendulum.
7. To study the relationship between force of limiting friction and normal reaction and to find the co-efficient of friction between a block and a horizontal surface.
8. 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 the angle of friction.

WEEKLY TEST-II

Theory:

9. **Mechanical Properties of Solids**
10. **Mechanical Properties of Fluids.**

Practicals:

9. To determine Young's modulus of elasticity of the material of a given wire.
10. To find the force constant of a helical spring by plotting a graph between load and extension.
11. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.

WEEKLY TEST-III

Theory:

11. **Thermal Properties of Matter**
12. **Behaviour of Perfect Gas and Kinetic Theory**
13. **Thermodynamics**

Practicals :

12. To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and I/V.
13. To find the speed of sound in air at room temperature using a resonance tube by two resonating positions.

ANNUAL EXAMINATION

(Theory = 70, Practicals = 30, Total=100)

Theory:

Previous Syllabus

14. **Oscillations**
15. **Wave motion**

Practicals :

All Previous experiments

14. To study the relation between frequency and length of a given wire under constant frequency using sonometer.
15. To study the relation between the length of a given wire and tension for constant frequency using sonometer.