PHYSICS PRACTICALS: 2021 GUIDELINES

Physics is a basic science and experimental physics is highly significant in the higher secondary level. Under the circumstances of Covid 19 pandemic, the following instructions are issued regarding Physics practicals.

Instructions:

- 1. A minimum of six (6) experiments should be performed by each student with at least three (3) experiments from Class XI experiments and at least three (3) experiments from Class XII experiments.
- 2. Students should maintain a practical logbook. Writing the Procedure of the experiment may be avoided as per the teacher's discretion.
- **3.** Performing experiment using the same apparatus/ principle and recording them as different experiments should be avoided .

LIST OF EXPERIMENTS

Class XI experiments (Section A)

- 1. Vernier Calipers
- 2. Screw Gauge
- 3. Sperometer
- 4. Common Balance
- 5. Parallelogram law apparataus.
- 6. Inclined plane.
- 7. Coefficient of friction
- 8. Moment Bar
- 9. Young's Modulus
- 10. Helical Spring
- 11. Viscosity
- 12. Sruface Tension
- 13. Newton's law of cooling
- 14. Specific heat capacity.
- 15. Simple Pendulum
- 16. Sonometer
- 17. Resonance Column

Class XII experiments (Section B)

- 1. Ohm's law
- 2. Metre Bridge I
- 3. Metre Bridge II
- 4. Potentiometer I
- 5. Potentiometer II
- 6. Frequency of AC
- 7. Concave Mirror
- 8. Convex Lens
- 9. Logic Gates

- 10. Convex mirror.
- 11. Concave Lens
- 12. Refraction through a prism
- 13. Glass Slab- Refractive Index
- 14. Spectrometer

Practical Examination: General Instructions

- 1. Two experiments should be done at the time of practical examination, one experiment from XI (section A) and the other experiment from XII (section B).
- 2. Scientific calculator can be used.
- 3. Total marks for the practical examination is forty (40).

Score Distribution	<u>Score</u>
1. Formula and Principle	: 5
2. Setting up of apparatus	: 2
3. Performance and recording of observation	: 6
4. Calculation and result in SI unit	:4
5. Viva voce	:1
Total for one experiment	:18
Total for two experiments	: 18 x 2 = 36.
6. Record book	: 4
Total	: 40