PROF. SANTOSH MITTAL Hr. Sec. SCHOOL, PACHORE

PRACTICAL EXAMINATION OF SSCE 2026

Physics (042)

Class : XII **Max. Marks: 30**

Date : 13/01/2026 **Time Allowed: 180 Min**

Q1. Two experiments one from each section **(7+7)**

Section A

(1) To determine resistivity of two wires by plotting a graph for potential difference versus current.

(2) To find resistance of a given wire / standard resistor using metre bridge.

(3) To verify the laws of combination (series) of resistances using a metre bridge.

(4) To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.

Section B

(1) To find the focal length of a convex lens by plotting graphs between u and v or between 1/u and 1/v.

(2) To find the values of v for different values of u in case of a concave mirror and to find the focal length.

(3) To find the focal length of a convex mirror, using a convex lens.

(4) To draw the I-V characteristic curve for a p-n junction in forward bias and reverse bias.

Q2. Practical record [experiments and activities] **(5 Marks)**

Q3. One activity from any section **(3 Marks)**

A_1. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.

A_2. To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

A_3. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter

B_1. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items

B_2. To study the nature and size of the image formed by a convex lens with help of a candle and a screen when the candle is at the different positions from the lens.

B_3. To study the nature and size of the image formed by a concave mirror with help of a candle and a screen when the candle is at the different positions from the mirror.

Q4. Investigatory Project **(3 Marks)**

Q5. Viva on experiments, activities and project **(5 Marks)**

Signature **Signature**

Internal Examiner **External Examiner**