GREEN LAWNS HIGH SCHOOL

PRELIMINARY EXAMINATION 2020-21

SUBJECT: PHYSICS PRACTICALS   CLASS: X
TIME: 1 HOUR   MARKS: 20

Experiment No. 1
Aim: To verify Ohm's Law and find the value of an unknown resistance.

1) Write down the relationship between Potential difference (V), Current (I) and resistance (R).
2) Which instrument used to measure electric current?
3) In an electric circuit containing unknown resistance, ammeter, key, rheostat and battery, where will you connect voltmeter to verify Ohm's law?
4) What is the function of rheostat?
5) A voltmeter should have _____ resistance.
6) If the length of a given resistor is increased, what will happen to the overall resistance?
7) What is the nature of graph obtained for V and I?
8) How to calculate the resistance from this graph?
9) What is the resistance of the resistor in this circuit?
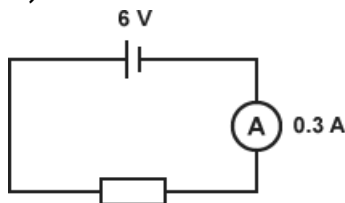
10) What is the current in this circuit?
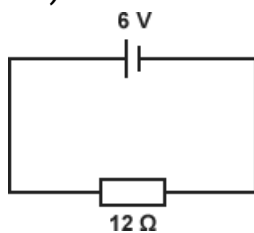
Experiment No. 2
Aim: To determine minimum angle of deviation of an equilateral prism.
1) What is angle of deviation?
2) List the factors affecting angle of deviation of a prism.
3) Why does a ray of light bend towards the base when it passes through a glass prism?
4) The angle between the two refracting surfaces of the prism is called as _____.
5) Write the relation between angle of prism, angle of deviation, angle of

incidence and angle of emergence.

6) In the position of minimum deviation angle of incidence is _____ angle of emergence.

7) Which of the following figures shows the correct position of minimum deviation in prism?
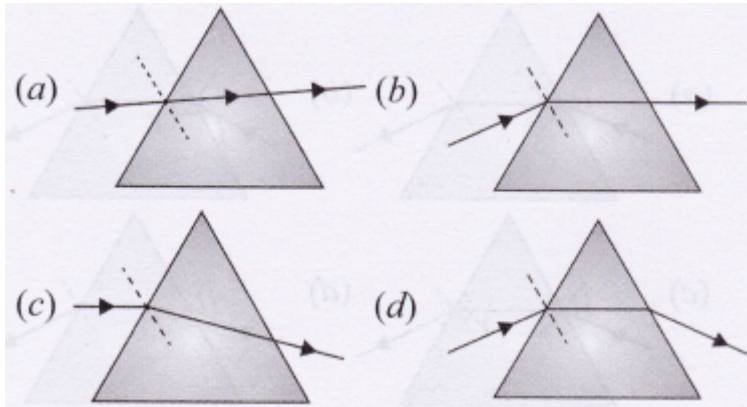
8) The angle of prism is 60° and the minimum deviation it produces is of 30°. The angle of incidence will be _____.

9) When the angle of incidence increased, how does it affect the angle of deviation?

10) For the refraction of a ray of light through a glass prism, the path of a ray of light is shown below:
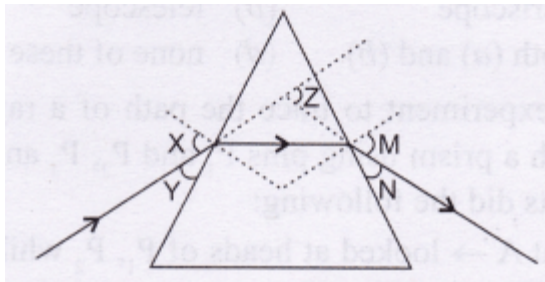
Identify by which letters following angles are represented:

i) angle of incidence ii) the angle of emergence iii) the angle of deviation