SUCCESS KEY TEST SERIES

X- Semi English

(Unit test-2 Science-1 (Ch- 4,5,6,))

Science And Technology - I

DATE:

TIME: 1 hrs

MARKS: 20

SEAT NO:

Q.1 A) Solve the following questions. **(2)**

1) Crown glass : 1.52 : : flint glass : ..... .

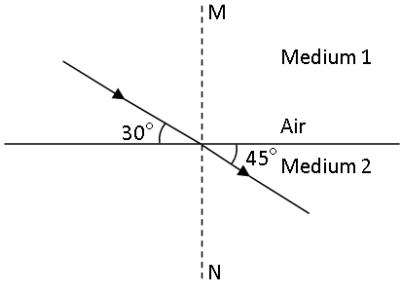
2) In SI system, heat is measured in .....

B) Choose the correct alternative and rewrite the sentence **(3)**

1) The magnetic field produced by a given current in the wire ..... as the distance from the wire increases.

a. increases b. decreases c. remains the same d. doubles.

2) The figure shows the path of a ray of light propagating from medium 1 to medium 2. What is the refractive index of medium 2 with respect to medium 1 ?



a. $\frac{\sin 45^\circ}{\sin 60^\circ}$ b. $\frac{\sin 60^\circ}{\sin 45^\circ}$ c. $\frac{\sin 45^\circ}{\sin 30^\circ}$ d. $\frac{\sin 30^\circ}{\sin 45^\circ}$

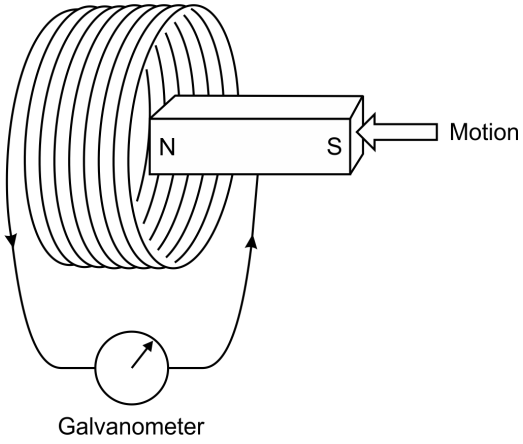
3) ..... are used in domestic appliances like mixers, washing machines and refrigerators.

a. AC motors b. DC motors c. AC generators d. DC generators

Q.2 Solve the following questions. (Any two) **(4)**

1) In cold regions in winter, the rocks crack due to anomalous expansion of water.

2) When the magnet shown in the diagram below is moving towards the coil, the galvanometer gives a reading to the right.

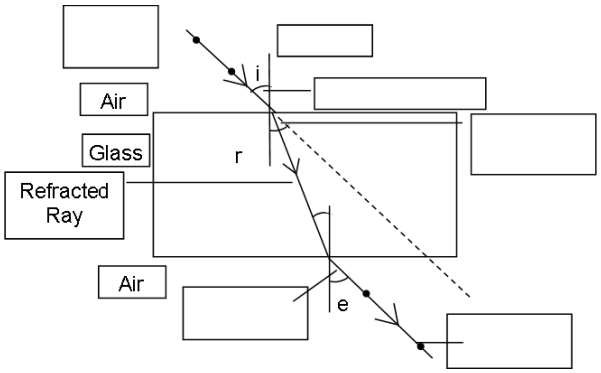


i. What is the name of the effect being produced by the moving magnet?
ii. State what happens to the reading shown on the galvanometer when the magnet is moving away from the coil.

3) Name and explain the device shown in the picture and state its principle.

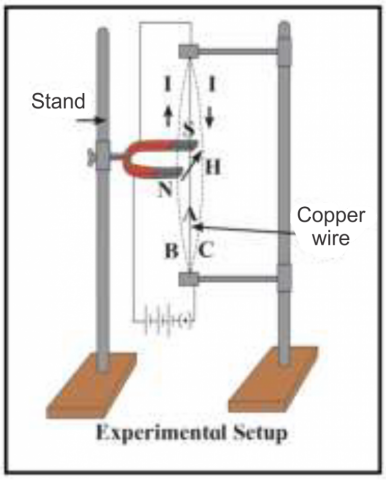
Q.3 Solve the following questions. (Any two) **(6)**

1) Complete the given diagram.



3) i. Show with the help of diagram when a light ray passes from a rarer medium to denser medium.
ii. Give reason for the same.

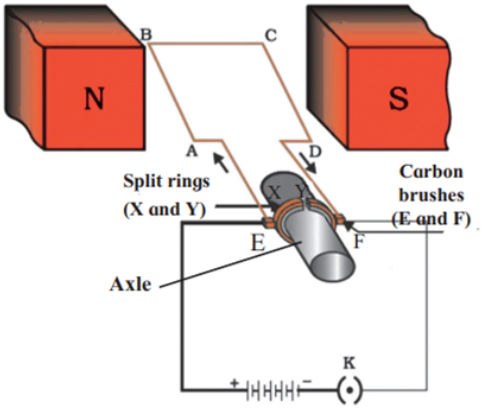
2)



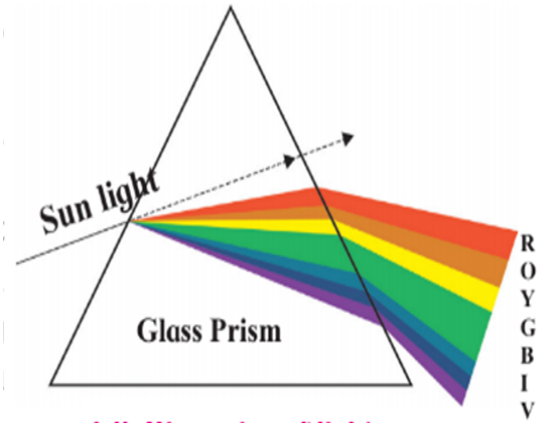
i. Which principle is explained in this figure?
ii. Which rule is used to find out the direction of force in this principle?
iii. In which machine this principle is used? Draw a diagram showing working of that machine.

Q.4 Solve the following questions. (Any one) **(5)**

1) Explain the working of the given diagram.



2)



i. Which phenomenon is shown.
ii. Name all the components of white light in sequence.
iii. Who was the first person to use glass prism.
iv. Which light bends the least and which bends the most.
v. What is the name given to this beams of seven colours of light.