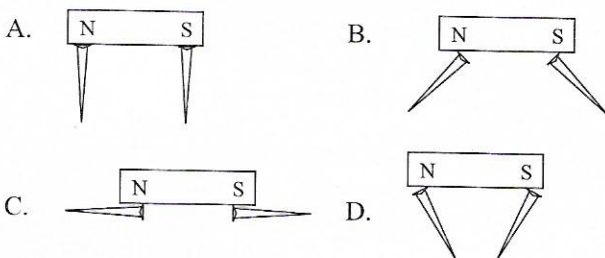
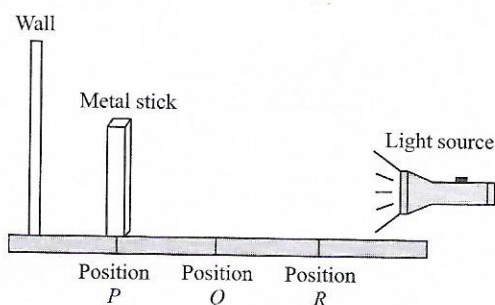


SCIENCE

11. Which figure correctly shows two iron nails hanging from a bar magnet?



12. A student wanted to find out how the distance between a light source and an object affects the length of the shadow. He placed the same metal stick at three different positions P , Q and R as marked in figure. At these positions, he recorded the length of the shadow cast on the wall (in cm) as x_P , x_Q and x_R respectively.



Which one of the following options is the most appropriate reading?

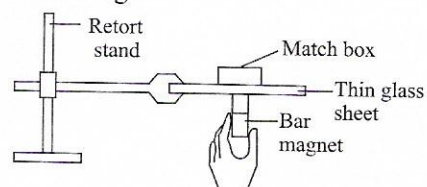
	x_P	x_Q	x_R
A.	26	20	14
B.	14	20	26
C.	14	14	20
D.	26	20	26

13. Column I has different types of motion and column II has examples of motion in different order. Match column I with column II and select the correct option from the given codes.

Column I	Column II
P. Circular motion	(i) A stone is dropped from a tower
Q. Periodic motion	(ii) A mark on blades of a rotating fan
R. Rectilinear motion	(iii) Motion of strings of a guitar
S. Combined motion	(iv) A ball is rolling on the ground

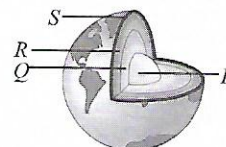
A. P-(i), Q-(ii), R-(iii), S-(iv)
 B. P-(iv), Q-(iii), R-(ii), S-(i)
 C. P-(ii), Q-(iii), R-(i), S-(iv)
 D. P-(ii), Q-(iii), R-(iv), S-(i)

14. Which of the following statements is/are correct?
- The error in measurement of length is caused by positioning the eye incorrectly.
 - The SI unit of length is metre and $1 \text{ m} = 1000 \text{ cm}$.
 - The smallest length that could be measured by different devices may be different.
- A. I only
 B. III only
 C. I and II only
 D. I and III only
15. A matchbox containing an unknown object is placed on a thin sheet of glass in the experimental set-up shown in the figure.



When the bar magnet moves, it is able to drag the match box along the magnet. What is most likely to be found in the matchbox?

- A. Marble
 B. Toothpick
 C. Copper coin
 D. Steel ball bearing
16. Refer to the given figure and select the correct option regarding it.



Inside the earth

- A. P is the molten part made up of nickel and iron.
 B. The hottest part of the earth is R which is solid.
 C. Q is connected to the surface of earth with the help of volcanoes.
 D. Minerals and oil deposits are found in the part S .
17. A student poured some boiling hot water into a glass filled with ice. Which of the following would happen?
- The ice would melt.
 - The ice would change its state.
 - The glass will crack.
 - The hot water will gain some heat.
- A. I and II only
 B. II and III only
 C. I, II and III only
 D. I, II and IV only

18. Which of the following properties is/are correct about the image formed by a plane mirror?
- The image is at the same distance from the mirror as the object.
 - The image is upside down.
 - The image is laterally inverted.
- A. I only
 B. I and III only
 C. II and III only
 D. I, II, and III