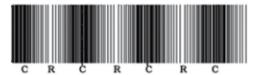


PRISM WORLD

Std.: 9 (English) Science 1 Marks: 20 Time: 1 hour Date: Chapter: 11 to 12 Q.1 A) Choose the correct alternative and rewrite the sentence (1) The image formed by the plane mirror is a. inverted b. smaller d. diminished c. laterally inverted B) Answer the following questions. (2) 1) Find co-related terms: Concave mirror :: Divergent light beam : Convex mirror 2) Find the odd man out: 2) Density, Temperature, Pressure, Molecular weight. Q.2 A) Give scientific reasons (Any one) (2) 1) The magnification of real images is always negative. 2) A person observes lightning first and then hears the thunder. B) Answer the following questions. (Any two) uour Dreams (4) 1) Write short notes 1) Sonography 2) Distinguish between Principal focus of the concave mirror & Principal focus of the convex mirror. 3) Sound waves of wavelength 1cm have a velocity of 340 m/s in air. What is the frequency? Can this sound be heard by the human ear? Q.3 Answer the following questions. (Any two) (6)1) Why does obtaining the image of the sun on a paper with the help of a concave mirror burn the paper? 2) An object of height 7 cm is kept at a distance of 25 cm in front of a concave mirror. The focal length of the mirror is 15 cm. At what distance from the mirror should a screen be kept so as to get a clear image? What will be the size and nature of the image?

3) Answer the questions based on the figure given below.

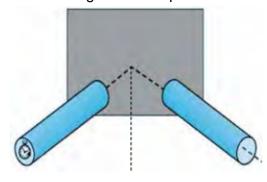


- a. How many waves (vibrations) does the above image represent?
- b. What is the frequency if the wave shown in the figure propagates in 5 seconds?
- c. What is the effect on wavelength if the frequency is increased?

Q.4 Answer the following questions. (Any one)

(5)

1) Label the diagram and explain.



2) What sign conventions are used for reflection from a spherical mirror?

