

Value Based Questions

1. Kanika carried out an experiment on determination of speed of sound in air using resonance tube apparatus and obtained absurd results. She should

- (a) record the result as such.**
- (b) manipulate the result and report the answer nearer to actual value of velocity of sound in air.**
- (c) copy the result obtained by another student.**
- (d) report the result as such and discuss the matter with the teacher to find out the reasons for wrong results.**

Answer the following questions based on the above information:

- (i) Which is the most appropriate option for Kanika?**
- (ii) What values will Kanika be promoting through preferring this option?**
- (iii) Give one more example of promoting such values in real life situations.**

Ans. (i) (d)

(ii) Intellectual honesty, desire to know more and improve.

(iii) Submitting honest information for income tax returns, honest dealings.

2. Kunal and Abhimanyu were waiting to go across a railway crossing. Kunal jumped over the barrier and curiously put his ear on the railway track. Abhimanyu opposed Kunal and pulled him away from the railway track.

- (i) Why did Kunal put his ear on the railway track?**
- (ii) Can sound travel faster through (a) Copper (b) water.**
- (iii) Why did Abhimanyu pull Kunal away from the railway track?**

Ans. (i) To hear the sound of the coming train because sound travel within the rail track and get the idea of distance of incoming train.

(ii) Copper.

(iii) For safety as he cares for his friend..

3. Reena's grandmother took her mother to a doctor as she was four months pregnant for ultra-sonography. But she showed her interest in determining whether the child is a boy or a girl. The doctor was annoyed and refused to disclose the gender of the child.

- (i) What is ultra-sonography?**
- (ii) Why do you think the doctor refused to determine the gender of the child?**
- (iii) What values are promoted by the doctor?**

Ans. (i) The technique of obtaining pictures of internal organs of body by using echoes of ultrasound pulses is called ultrasonography.

(ii) To disclose the gender is against the law and also to discourage the curiosity of knowing the sex of the child before birth.

(iii) Obeying laws, honesty.