

Solution of the day/Oct-30, 2018

6th Class

- **Mathematics:** Ans: (C)
- **Physics:** Ans: (A)
- **Chemistry:** Ans: (B)
- **Biology:** Ans: (B)

7th Class

- **Mathematics:** Ans: (C)
- **Physics:** Ans: 8
- **Chemistry:** Ans: False -Silver is the best conductor of electricity while mercury is a poor conductor.
- **Biology:** Ans: (D)

8th class

- **Mathematics:** Ans: (D)

- **Physics:**

Sol: $h_1 = 2\text{m}$; $u = -16\text{ cm}$; $h_2 = 3\text{ cm}$

$$\text{i) } \frac{v}{u} = \frac{h_2}{h_1} \text{ or } v = u \times \frac{h_2}{h_1} = -16 \times \frac{3}{2} = -24\text{cm}$$

therefore, the image is formed at a distance of 24cm in front of the mirror.

$$\text{ii) Now } \frac{1}{f} = \frac{1}{u} + \frac{1}{v} \text{ or } \frac{1}{f} = \frac{1}{-16} + \frac{1}{-24} = -\frac{1}{16} - \frac{1}{24} = -\frac{5}{48} \therefore f = -\frac{48}{5} = -9.6\text{cm}$$

- **Chemistry:** Ans: (B)
- **Biology:** Ans: (C)

9th Class

- **Mathematics:** Ans: (B)
- **Physics:** Ans: Focal length

➤ **Chemistry:** Ans: A-4, B-3, C-b, D-1

➤ **Biology:** Ans: (B)

10th class

➤ **Mathematics:** Ans: (A)

➤ **Physics:** Ans: $\mu_1 \sin i = \mu_2 \sin r$ OR $1.0 \sin 45^\circ = 1.526 \sin r \therefore \sin r = \frac{1.0}{1.526} \sin 45^\circ = 0.4634$
or $r = 27.61^\circ$ Deviation of light = $i - r = 45^\circ - 27.61^\circ = 17.39^\circ$

➤ **Chemistry:** Ans: (B)

➤ **Biology:** Ans: (B)

➤ **Reasoning :**

Ans: (A) 27 is not divisible by 7.