ONE TWO ACADEMY

STD 10 SCIENCE

Ray Optics

Total:- 25 marks **Time:- 45 minutes**

Answer the following questions: **4 x 1 = 4**

1. The power of lens is -4.0 D, calculate its focal length.
2. The path of light is called as _____.
3. State Lens formula.
4. Where should the object be placed near convex lens so that same sized image is formed ?

Answer any three of the following questions:- **3 x 2 = 6**

5. What are the four types of inelastic scattering.
6. Why are traffic signals red in colour.
7. State Snell's law.
8. State True or False (If False , correct it)
   (i) Velocity of light is greater in denser medium than in rarer medium.
   (ii) The image in an astronomical telescope is inverted.

Answer any two of the following questions:- **2 x 4 = 8**

10. Fill in the blanks :
    (i) Eye lens is fixed between _____ muscles.
    (ii) _____ is the most sensitive part of human eye.
    (iii) Which protects the internal parts of an eye.
    (iv) Eyes lens in (concave / convex) in nature.
    (v) ____ cm is the near point of human eye.
11. List out any five properties of light.
12. A beam of light passing through a diverging lens of focal length 0.3 m appear to be focussed at a distance 0.2 m behind the lens. Find the position of the object.

Answer any one of the following questions:- **1 x 7 = 7**

13. Explain the construction and working of a compound microscope.
14. Explain the types of defects of vision in detail.

All the Best | One Two Katral maiyam