St. Lawrence High School

A Jesuit Christian Minority Institution

Term : Pre – Test

Solution of Work Sheet – 14

Class – X | Subject – Physical Science | Date – 08.06.20

Chapter – Light | Topic – Human eye, Dispersion and scattering

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Choose the correct option for the following questions. $1 \times 15 = 15$

1. The minimum distance at which an object can be seen distinctly is called –
   a. Near point of the eye
   b. Far point of the eye
   c. Accommodation point
   d. None of these
   Ans: a. Near point of the eye
2. The farthest point up to which the eye can see object clearly is called –
   a. Near point of the eye
   b. Far point of the eye
   c. Accommodation point
   d. None of these
   Ans: Far point of the eye
3. The curvature of the eye lens can be modified to modify the focal length. This is known as –
   a. Modification
   b. Adaptation
   c. Accommodation
   d. None of these
   Ans: c. Accommodation
4. Focal length of normal eye lens for near point view is –
   a. Maximum
   b. Minimum
   c. Intermediate
   d. Zero
   Ans: b. Minimum
5. Focal length of normal eye lens for far point view is –
   a. Maximum
   b. Minimum
   c. Intermediate
   d. Zero
   Ans: a. Maximum
6. For normal eye, the far point is at –
   a. 25cm
   b. 50cm
   c. Infinity
   d. None of these
   Ans: c. Infinity

7. Short-sightedness can be corrected by introducing –
    a. Convex mirror
    b. Concave mirror
    c. Convex lens
    d. Concave lens
    Ans: d. Concave lens
8. Long-sightedness can be corrected by introducing –
    a. Convex mirror
    b. Cylindrical lens
    c. Convex lens
    d. Concave lens
    Ans: c. Convex lens
9. In a particular medium, the light which has highest refractive index is –
    a. Red
    b. Violet
    c. Yellow
    d. Blue
    Ans: b. Violet
10. During dispersion by prism, the light that is deviated most is –
    a. Red
    b. Violet
    c. Yellow
    d. Blue
    Ans: b. violet
11. During dispersion by prism, the light that is deviated least is –
    a. Red
    b. Violet
    c. Yellow
    d. Blue
    Ans: b. red
12. During dispersion by prism –
    a. Deviations of all rays are same for same angle of incidence
    b. Angle of refraction of all rays are same for same angle of incidence
    c. Deviation of different rays are different although angle of incidence is same for all
    d. Deviation does not depend on the colour of light.
    Ans: c. Deviation of different rays are different although angle of incidence is same for all
13. According to Cauchy's relation, refractive index is –
    a. Directly proportional to wavelength
    b. Inversely proportional to wavelength
    c. Independent of wavelength
    d. Same for all colour in a medium.
    Ans: Inversely proportional to wavelength
14. Rainbow is formed due to -
    a. Reflection of light by tiny water drops
    b. Dispersion of light by tiny water drops
    c. Scattering of light by tiny water drops
    d. None of these
    Ans: b. Dispersion of light by tiny water drops

15. The sky is blue due to –
    a. Reflection
    b. Refraction
    c. Dispersion
    d. Scattering
    Ans: Scattering

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