

HOLIDAY HOMEWORK(2018-19)

PHYSICS

CLASS VIII

1. A tank of water is viewed normally from above. State how the depth of the tank appears to change. Draw a labeled ray diagram to justify your answer.
2. Define refraction. State the differences between refraction through a glass slab and that of a prism.
3. What do you mean by the statement “the refractive index of diamond is 2.41”?
4. Explain the formation of mirage in a desert.
5. A light ray is incident from a denser medium on the boundary separating it from a rarer medium at an angle of incidence equal to the critical angle. What is the angle of refraction for the ray?
6. The real depth of the liquid is 4cm. The coin placed in the liquid appears to be raised by 1cm. Find the refractive index of the liquid. Hence name the liquid.
7. White light is incident on a hollow prism. Will dispersion take place? Justify your answer.
8. The angle of incidence on a surface separating the two media is 0° . Find the angle between the surface separating the two media and the incident ray.
9. Define dispersion of light. What is the cause of dispersion?
10. State the function of the following parts of the human eye.
a)iris b)ciliary muscles c)cornea d) lens e)retina f)vitreous humor