

VISWABHARATI - GUDIVADA

WORK SHEET - 2

Chapters: Heat , Refraction of light on curved surfaces and Human eye & colourful world

Class: X

Time: 1.30 Min

Subject: Physics

Marks: 30

Name _____ **Class/Sec:** _____ **Roll No:** _____

D) Answer the following Questions

15 × 2 = 30

1. Observe the following table and find the value of 'x'?

U	30cm	60
V	30cm	x

2. Sreenath can read a book but he does not able to read the letters on black board clearly.
- A) What is sreenath defect.
B) What correction les need for sreenath.
3. Mohan viewed white light through transparent scale, he observed some colours. Predict the colours and write the Phenomena.
4. Write the application of lenses in day to day life.
5. "A boy is suffering from eye defect has been given a prescription – 2 D" . Based on above information, answer the following questions.
- A) Identify the eye defect he is suffering.
B) Write the nature and focal length of the lens.
6. The refractive index on convex lens material is 1.46. The refractive index of Benzene and water are 1.5 & 1.0. How does convex lens behaves when it kept Benzene and water.
7. Write the materials to find out refractive index of prism .What is the necessity of graph in this experiment.
8. How do you appreciate the working of Iris in the eye.
9. The local length of Converging lens is 20cms. Where will the image be formed, if an object is placed at 60cm from the lens. Write Characteristics of the image.
10. What is the reason for the blue colour of the sky. How do you appreciate the role of molecules in the atmosphere.
11. Ravi want to make a lens. Which formula he has to follow. Write the formula and explain terms.
12. A Convex lens is made of 5 different materials as shown in the figure.
How many images does it form? And Explain.



13. Complete the following diagram to find object distance and image by keeping a lens.



14. The image formation formula for curved surface is $\frac{n_2}{v} = \frac{n_1}{u} = \frac{n_2 - n_1}{R}$. Write the same corresponding formula for plane surface.
15. How do you appreciate the working of Ciliary muscles in the human eye?