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## I)Answer the following questions

1.The maximum focal length of Bhanu's eye is 2.47 cm . What defect does he has? Which lens is used to correct the defect of him?
2.Define the power of lens
3.Can a virtual image be photographed by a camera?
4. Write the laws of refractions
5.The absolute refractive index of water is $4 / 3$. What is the critical angle?
II) Answer the following questions.
$2 \times 2=4 \mathrm{M}$
6.Suppose you inside the water in a swimming pool near an edge.A friend is standing on the edge. Do you find your friend taller or shorter than his usual height?
7.In what cases does a light ray not deviate at the interface of the two media?

## III) Answer the following questions.

8. Which lens do you suggest to a person who is suffering from myopia? Draw the diagrams represents that how that lens correct the vision of that person?

> (OR)

Draw ray diagrams for convex lens and explain the nature, position of the image
a) Object is placed at $F_{2}$
b)Object is placed at beyond $2 \mathrm{~F}_{2}$
9.Explain the formation of mirage?

## (OR)

How do you find the experimentally the refractive index of material of prism
IV) Fill in the blanks.
$3 \times 1 / 2=1 \frac{1}{2} \mathrm{M}$
10.The splitting of white light into different colours is called $\qquad$
11. During refraction of light, the character of light which does not changes $\qquad$
12.The refractive index of glass with respect to air is 2 . Then the critical angle of glass-air interface is $\qquad$
V) Answer the following with one word or phrase.
13. write the lens formula
14.Draw the symbol of Biconcave lens
15. How many images are formed, If a convex lens is made up of five different materials?

