SLIP TEST- 5

CHAPTER-5 : REFRACTION OF LIGHT AT PLANE SURFACES

Name:…….. Section:……. Roll No:……... Max.Marks:20

……

I. Answer the following questions. Each carries four marks. 2 x 4 = 8 M

1) What is the reason behind the shining of diamonds? How do you appreciate it?

2) What is total internal reflection? Write some applications of total internal reflection in our daily life.

II. Answer the following questions briefly. Each carries two marks. 2 x 2 = 4 M

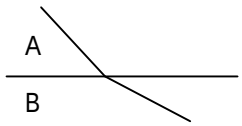
3) The absolute refractive index of a substance is 2. Find the critical angle?

4) A friend is standing on the edge of a swimming pool. You are swimming in the pool. Do you find your friend taller or shorter?

III. Answer the following in one or two sentences. Each carries one marks. 2 x 1 = 2 M

5) Define relative refractive index.

6) Which is denser medium? Either "A" or "B" ?



IV. Choose the correct choice and write down in the given brackets. 6 x 1 = 6 M

7) Refractive index of Air [ ]

A. 1.0003 **B.** 1.31 **C.** 1.44 **D.** 2.42

8) The refractive substances are …… [ ]

A. Opaque substances **B.** Transparent substances

C. Mirrors **D.** None of the above

9) Velocity of light is less in …… [ ]

A. Denser medium **B.** Rarer medium

C. Can not say **D.** None of the above

10) Snell's law [ ]

A. n_1. Sin i = n_2. Sin r **B.** n_2. Sin i = n_1. Sin r

C. $\frac{n_1}{n_2} = \frac{Sin\ i}{Sin\ r}$ **D.** $\frac{n_2}{n_1} = \frac{Sin\ r}{Sin\ i}$

11) Speed of light in vacuum is …… [ ]

A. 2 x 10^8 m/s **B.** 3 x 10^8 m/s

C. 1 x 10^8 m/s **D.** 3 x 10^5 m/s

12) Refractive index = …… [ ]

A. $\frac{Thickness\ of\ glass\ slab}{Thickness\ of\ glass\ slab + vertical\ shift}$ **B.** $\frac{Thickness\ of\ glass\ slab + vertical\ shift}{Thickness\ of\ glass\ slab}$

C. $\frac{Thickness\ of\ glass\ slab}{Thickness\ of\ glass\ slab - vertical\ shift}$ **D.** $\frac{Thickness\ of\ glass\ slab - vertical\ shift}{Thickness\ of\ glass\ slab}$

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