SUBJECT:- PHYSICS               CLASS:- XTH               DATE:27/06/XX

**SUBJECT TEACHER:- MR. NEEL NIRANJAN**

**CHAPTER 4. (LIGHT)**

**5. The refractive indices of four media A, B, C and D are given in the following table:**

| Medium | A | B | C | |
|---|---|---|---|---|
| Refractive Index | 1.33 | 1.50 | 1.52 | |

**If light, travels from one medium to another, in which case the change in speed will be (i) minimum, (ii) maximum? [Delhi(C)]**
**Answer.** (i) Minimum change is seen as light moves between 1.50 and 1.52, i.e. B and C.
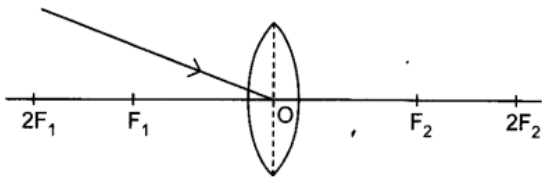(ii) Maximum change when light moves between 1.33 and 2.40, i.e. A and D.

**6. "The refractive index of diamond is 2.42". What is the meaning of this statement in relation to speed of light? [Delhi]**
**Answer.**

Since, $v = \dfrac{c}{n}$, $n = 2.42$ means that the speed of light in diamond is $\dfrac{1}{2.42}$ times

of light in free space.

**7. Redraw the given diagram and show the path of the refracted ray: [All India(C)]**



**Answer.**