

Class: X Name of Student.....

- This **ASSESSMENT SHEET** is of 10 Marks.
- It has been divided into **TWO SECTIONS**.
- **SECTION-I** contains Multiple Choice Questions (MCQ) of 1 mark each.
- **SECTION-II** contains CASE STUDY QUESTIONS, which are Multiple Choice Questions (MCQ) of 1 mark each.

SECTION-I

1. Give an example of a phenomenon where Tyndall effect can be observed.

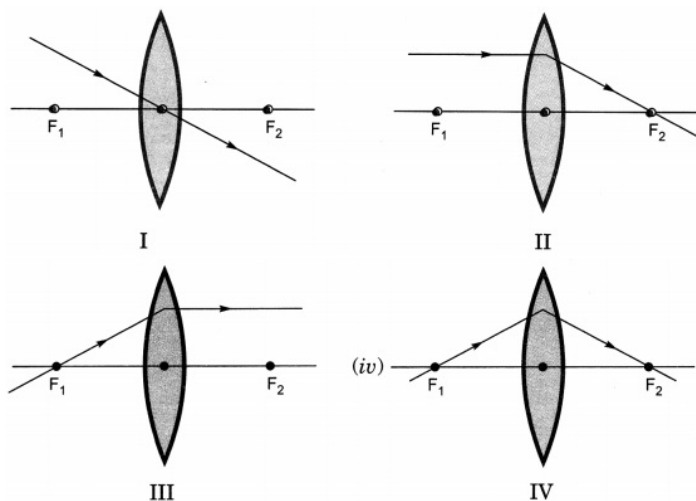
- A. Red colour of sky ☐
- B. Rainbow formation in the sky ☐
- C. Twinkling of stars ☐
- D. None of these ☐

2. What is the cause of dispersion of white light on passing through a prism?

- A. Different colours have different speeds in the prism. ☐
- B. Non parallel surfaces of the prism. ☐
- C. Both A and B ☐
- D. Neither A nor B ☐

3. The diagrams showing the correct path of the ray after passing through a lens are –

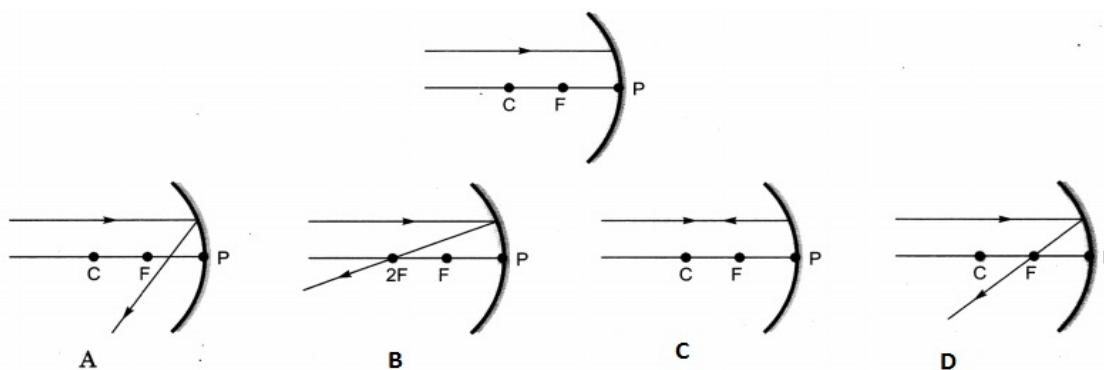
- A. I and II only ☐
- B. II and III only ☐
- C. I, II and III ☐
- D. I, II and IV ☐



4. Name the atmospheric phenomenon due to which the sun can be seen above the horizon about two minutes before actual sunrise.

- A. Scattering of light. ☐
- B. Internal reflection of light ☐
- C. Atmospheric refraction ☐
- D. Refractive Index ☐

5. Which of the following ray diagrams is correct for the ray of light incident on a concave mirror as shown in figure?



- A. ☐ A
B. ☐ B
C. ☐ C
D. ☐ D

6. The colour which bends the least while passing through a glass prism is-

- A. Violet. ☐
B. Red ☐
C. Blue ☐
D. Green ☐

SECTION-II

CASE STUDY QUESTIONS

Read the given paragraph carefully and answer the following questions:

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

Medium	A	B	C	D
Refractive Index	1.33	1.50	1.52	2.40

7. If light, travels from one medium to another, in which case the change in speed will be minimum-

- A. When light moves between A and B. ☐
B. When light moves between B and C ☐
C. When light moves between C and D ☐
D. When light moves between A and D ☐

8. If light, travels from one medium to another, in which case the change in speed will be maximum-

- A. When light moves between A and B. ☐
B. When light moves between B and C ☐
C. When light moves between C and D ☐

D. When light moves between A and D

☐

9. The refractive index of diamond is 2.42. What is the meaning of this statement in relation to speed of light?

A. Speed of light in diamond is 2.42 times speed of light in free space.

☐

B. Speed of light in diamond is $1/2.42$ times speed of light in free space.

☐

C. Speed of light in diamond is same as of speed of light in free space.

☐

D. Speed of light in diamond is twice the speed of light in free space.

☐

10. Light travels fastest in-

A. Water.

☐

B. Air

☐

C. Glass

☐

D. Diamond

☐