

Chapter 15

MULTIPLE CHOICE QUESTIONS

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|--------|--------|--------|--------|
| 1. (c) | 2. (a) | 3. (b) | 4. (b) |
| 5. (b) | 6. (b) | 7. (c) | 8. (b) |

VERY SHORT ANSWER QUESTIONS

9. Concave lens.
10. (a) concave
(b) plane
(c) convex
(d) concave
11. (a) False
(b) False
(c) True
(d) False

SHORT ANSWER QUESTIONS

12. Convex mirror. Convex mirrors can form images of objects spread over a large area. So these help the drivers to see the traffic of a large area behind them.
13. A – convex lens; B – concave lens.
14. No, laser torch gives out light of only one colour.
- 15.
- | | | | | |
|---|---|----------|---|-----|
| 1 | → | Red | ← | 7 |
| 2 | → | Orange | ← | 6 |
| 3 | → | Yellow | ← | 5 |
| A | → | 4 Green | ← | 4 B |
| | → | 5 Blue | ← | 3 |
| | → | 6 Indigo | ← | 2 |
| | → | 7 Violet | ← | 1 |

16. The driver will not be able to see traffic spread over a large area behind him.
17. The beam of light will be diffused with lower intensity.
18. The image formed on the screen could be enlarged and erect if the object is placed upside down between F and $2F$ of the lens.
19. If the letters appear bigger/magnified, then the lens is a convex lens. If the letters appear smaller, then the lens will be concave lens.
20. He will fix a convex mirror because it can form images of object spread over a large area.
21. The object is moving away from the lens.

LONG ANSWER QUESTIONS

22. **Hint :** (i) By using a concave mirror and a screen.
(ii) By using a convex lens and a screen.
23. It is a convex lens.
No, when the object is placed close to a convex lens then the image formed is virtual which cannot be obtained on screen.
24. **Hint :** By forming images with the help of the three mirrors.