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## PHYSICS

## BOOKS - MBD -HARYANA BOARD

## LIGHT

Example

1. Suppose you are in a dark room. Can you see
objects in the room? Can you see objects outside the room? Explain.
2. Differentiate between regular and diffused reflection. Does diffused reflection mean the failure of the laws of reflection?

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3. Mention against each of the whether regular or diffused reflection will take place when a beam of light strikes. Justify your
answer in each case.

Polished wooden table

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4. Mention against each of the whether regular or diffused reflection will take place when a beam of light strikes. Justify your answer in each case.

Chalk powder

## D Watch Video Solution

5. Mention against each of the whether regular or diffused reflection will take place when a beam of light strikes. Justify your answer in each case.

Cardboard surface

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6. Mention against each of the whether regular or diffused reflection will take place when a beam of light strikes. Justify your
answer in each case.

Marble floor with water spread over it

## D Watch Video Solution

7. Mention against each of the whether regular or diffused reflection will take place
when a beam of light strikes. Justify your answer in each case.

Mirror

## D Watch Video Solution

8. Mention against each of the whether regular or diffused reflection will take place when a beam of light strikes. Justify your answer in each case.

Piece of paper

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9. State the laws of reflection.

## First law of reflection:

Second law of reflection:
10. Describe an activity to show that the incident ray, the reflected ray and the normal at the point of incidence lie in the same plane.

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11. Fill in the blank in

A person 1 m in front of a plane mirror seems
to be ____m away from his image.

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12. Fill in the blank in

If you touch your ____-_ear with your right
hand in front of a plane mirror, it will be seen
in the mirror that your right ear is touched with your

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13. Fill in the blank in

The size of the pupil becomes
see in dim light.

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14. Fill in the blank in

Night birds have cones than rods in
their eyes.

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15. Angle of incidence is equal to the angle of reflection.
A. Always
B. Sometimes
C. Under special conditions
D. Never

## Answer:

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16. Image formed by a plane mirror is
A. virtual, behind the mirror and enlarged
B. virtual, behind the mirror and of same
size as the object.
C. real at the surface of mirror and enlarged.
D. real, behind the mirror and of same size
as the object.

## Answer:

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17. Describe the construction of a kaleidoscope.

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18. Draw a labelled sketch of the human eye.

Explain the functions of each part.

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19. Gurmit wanted to perform Activity 16.8 using a laser torch. Her teacher advised her not to do so. Can you explain the basis of the teacher's advice?

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20. Explain how you can take care of your eyes

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21. What is the angle of incidence of a ray if
the reflected ray is at an angle of $90^{\circ}$ to the incident ray?

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22. Two mirrors meet at right angles. A ray of
light is incident on one at an angle of $30^{\circ}$ as
shown in Draw the reflected ray from the

## second mirror.

## 

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23. The plane and polished surface that returns lightr falling on it in the same direction or any other direction is called:
A. Lens
B. Prisom
C. Mirror
D. Kaleidoscope

## Answer:

## D Watch Video Solution

24. How many colours are present in white sunlight?
A. 2
B. 5
C. 7
D. 3

## Answer:

## D Watch Video Solution

25. What is the most convenient distance for reading by a normal eye?
A. 10 cm
B. 25 cm
C. 15 cm
D. 20 cm

## Answer:

D Watch Video Solution

## 26. Fill in the blank in

The size of the pupil becomes
A. Small
B. Large
C. Neither small nor large
D. Very small

## Answer:

D Watch Video Solution
27. What is the Phenomena of splitting of light into its constituent colours called?
A. Reflection
B. Refraction
C. Dispersion
D. Combination

Answer:

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28. The eye lenses focuses:
A. On Cornea

## B. On Retina

## C. On Iris

D. None of these

## Answer:

D Watch Video Solution
29. How can you see an object in the dark?
30. It is what that helps us to see objects?

## D Watch Video Solution

31. Name any two Luminous bodies.

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32. Moon appears bright at night. Is it a
luminous or non-luminous body?

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33. Where is a reflection seen?

## D Watch Video Solution

34. Which surface can act as a mirror?

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35. If you are standing in front of a mirror and observing your own image what is the relation
between the distance of the object and the image from the mirrorr?

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36. What is the angle of reflection, when a ray
of light is incident normally on any mirror (spherical or plane)?

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37. Name two objects which split white light into manyt colours.

- Watch Video Solution

38. Name the seven colours of light. What is
this phenomenon called?

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39. Give one example of dispersion of light in nature.

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40. Is focal length of eye lens fixed? If not, why?
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41. What is the function of ciliary muscles in
human eye? What ability do they provide a human eye?

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42. What is the function of rod cells on the retina? Which cells detect colours?

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43. What are cones? What problem occurs if they don't work properly?

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44. What is basic cause of colour blindness?

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45. Why cats and bats are able to see at night?
46. At what rate the images pass one after the other on a cinema screen?

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47. What is retina? What type of photosensitive cells are present on the retina of the eye?
48. Name one device that can be used by short statured person to see over the head of a crowd.

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49. Find out the letters of English alphabet or any other language known to you in which the image formed in a plane mirror appears exactly like the letter itself. Discuss your findings.
50. Distinguish between luminous and non-
luminous bodies.

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51. How do we see objects?

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52. Give the conditions necessary for seeing an object.

D Watch Video Solution
53. What is the virtual image ? Give one situation where a virtual image is formed.
54. What do you understand by lateral inversion?

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55. State the laws of reflection of light.

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56. What is diffused reflection and regular reflection? Give examples.

## - Watch Video Solution

57. What do you understand by reflection of

## light?

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58. Define

Reflected Ray

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## 59. Define

Angle of reflection

## D Watch Video Solution

60. If incident ray strikes the mirror at $90^{\circ}$, what will be the angle of reflection?

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61. Dispersion of light
62. While passing through a prism, why does the white light split into seven colours.

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63. What is myopia?

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64. What is hypermetropia (far-sightedness) ?

What are its causes ? How can it be corrected
?

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65. Explain in short perception of colour.

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66. The following picture shows the reflection of light:


Name the ray AO

## - Watch Video Solution

67. The following picture shows the reflection
of light:


Name the ray OB

## ( Watch Video Solution

68. The following picture shows the reflection
of light:


Find the value of angle $x$

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69. Real image and Virtual image

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70. State the characteristics of the image
formed by a plane mirror.

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