



# INDIAN SCHOOL AL WADI AL KABIR

<b>Class: X</b>	<b>Department: SCIENCE 2020 -2021</b> <b>SUBJECT : PHYSICS</b>	<b>Date of submission:</b> <b>16.04.2020</b>
<b>MCQ Worksheet No:1</b>	<b>Topic: HUMAN EYE AND THE COLOURFUL WORLD</b> <b>PART I</b>	<b>Note:</b> <b>A4 FILE FORMAT</b> <b>[PORTFOLIO]</b>
<b>NAME OF THE STUDENT</b>	<b>CLASS &amp; SEC:</b>	<b>ROLL NO.</b>

## OBJECTIVE TYPE QUESTIONS

- The image formed by retina of human eye is
  - Virtual and erect
  - Real and inverted
  - Virtual and inverted
  - Real and erect
- The change in the focal length of human eye is caused due to
  - Ciliary muscles
  - Pupil
  - Cornea
  - Iris
- The least distance of distinct vision for a young adult with normal vision is
  - 25 m
  - 20 m
  - 25 cm
  - 20 cm
- The persistence of vision for human eye is
  - 1/10th of a second
  - 1/16th of a second
  - 1/6th of the second
  - 1/18th of a second
- The light sensitive cell present on retina and is sensitive to the intensity of light is:
  - Cones
  - Rods
  - Both rods and cones
  - None of these
- The phenomena of light responsible for the working of the human eye is
  - Reflection
  - Refraction
  - Power of accommodation
  - Persistence of vision
- The amount of light entering the human eye is controlled by
  - Ciliary muscles
  - Pupil
  - Cornea
  - Iris
- The part of the eyes refracts light entering the eye from external objects?
  - Lens
  - Cornea
  - Iris
  - Pupil
- Variation of focal length to form a sharp image on retina is called
  - accommodation
  - aperture
  - retina control
  - defect

10. In human eye, image is formed  
a. behind retina                      b. in front of retina  
c. on retina                              d. in between lens and retina
11. Light enters eye through a transparent membrane known as  
a. cornea                                  b. pupil  
c. retina                                    d. iris
12. Colored portion of eye that controls amount of light reaching retina is known as  
a. cornea                                  b. pupil  
c. retina                                    d. iris
13. Human eye acts like a  
a. endoscope                              b. camera  
c. telescope                                d. microscope
14. A person cannot see distinctly objects kept beyond 2 m. This defect can be corrected by using a lens of power  
(a) + 0.5 D                              (b) - 0.5 D  
(c) + 0.2 D                              (d) - 0.2 D
15. When light rays enter the eye, most of the refraction occurs at the  
(a) crystalline lens                      (b) outer surface of the cornea  
(c) iris                                        (d) pupil
16. The focal length of the eye lens increases when eye muscles  
(a) are relaxed and lens becomes thinner  
(b) contract and lens becomes thicker  
(c) are relaxed and lens becomes thicker  
(d) contract and lens becomes thinner
17. Which of the following statement is correct?  
(a) A person with myopia can see distant objects clearly  
(b) A person with hypermetropia can see nearby objects clearly  
(c) A person with myopia can see nearby objects clearly  
(d) A person with hypermetropia cannot see distant objects clearly
18. When we enter a cinema hall, we cannot see properly for a short time. This is because-  
a) Pupil does not open                      b) Pupil does not close  
c) Adjustment of size of pupil takes some time                      d) none of these above
19. Variable focal length of eye is responsible for-  
a) Accommodation of eye                      b) Persistence of vision  
c) Colour blindness                              d) Least distance of distinct vision
20. A concave lens of suitable focal length is used for correcting a-  
a) Myopic eye                                  b) Hypermetropic eye  
c) Both a and b                                d) nor a nor b
21. A human eye can focus objects at different distances by adjusting the focal length of the eye lens. This is due to –  
(a) Persistence of vision                      (b) Near sightedness  
(c) Accommodation                              (d) Far sightedness

22. Cinematography makes use of -  
 (a) Accommodation (b) Persistence of vision  
 (c) Least distance of distinct vision (d) Bi-focal lens system
23. Human eye forms the image of an object at its –  
 a. Cornea b. Pupil  
 c. Iris d. Retina
24. The change of focal length of an eye lens to focus the image of objects at varying distances is done by the action of the -  
 (a)Pupil (b)Retina  
 (c)Ciliary muscles (d)Blind spot
25. A myopic person cannot see clearly:-  
 (a)Distant objects (b) Near objects  
 (c)Near and distant objects (d)None of the above
26. A long-sighted person cannot see clearly:  
 (a)Near objects (b) Distant objects  
 (c) Both distant and near objects (d) None
27. A person having Presbyopia should use:-  
 (a)Convex lens (b) Concave lens  
 (c) Cylindrical lenses (d) Bifocal lenses
28. A person cannot see fundamental colours (red, blue, green). This defect is called:-  
 (a) Myopia (b) Presbyopia  
 (c) Colour blindness (d) Astigmatic
29. The defect of astigmatism can be rectified by using: -  
 (a)Convex lens (b) Cylindrical lens  
 (c) Concave lens (d) Bifocal lens
30. The term “accommodation” as applied to the eye, refers to its ability to:  
 a. Control the light intensity falling on the retina  
 b. Erect the inverted image formed on the retina  
 c. Vary the focal length of the lens  
 d. Vary the distance between the lens and retina
31. How do you think that the eye change in order to focus on near or distant objects?  
 a. The lens moves in or out b. The retina moves in or out  
 c. The lens becomes thicker or thinner d. The pupil gets larger or smaller
32. A person cannot see the distant objects clearly (though he can see the nearby objects clearly). He is suffering from the defect of vision called:  
 a. Cataract b. Hypermetropia  
 c. Myopia d. Presbyopia
33. A person got his eye tested. The optician’s prescription for the spectacles reads: Left eye: –3 D Right eye: 3.50 D The person is having a defect of vision called:  
 a. Presbyopia b. Myopia  
 c. Astigmatism d. Hypermetropia

34. A man finds it difficult to read the odometer on the dashboard of the car but is able to clearly read a distant road sign. Which of the following statement is correct about this man?

Discuss

- a. The near point of his eyes has receded away
- b. The near point of his eyes has come closer to him.
- c. The far point of his eyes has receded away.
- d. The far point of his eyes has come closer to him.

35 .With both eyes open, a person's field of view is about:

- |                |                |
|----------------|----------------|
| a. $90^\circ$  | b. $150^\circ$ |
| c. $180^\circ$ | d. $360^\circ$ |

36.

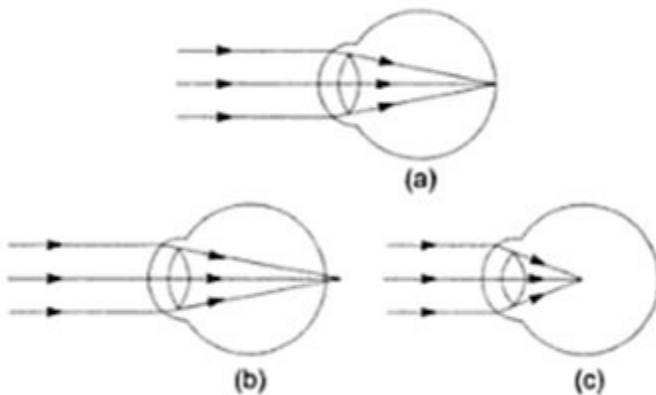


Figure a, b, c respectively; indicate the point in case of:

- a. The hypermetropic eye, the myopic eye and normal eye
- b. The normal eye, the myopic eye and hypermetropic eye
- c. The normal eye, the hypermetropic eye and myopic eye
- d. The myopic eye, the normal eye and hypermetropic eye

37 .The least distance of distinct vision for a young adult with normal vision is about

- |          |          |
|----------|----------|
| (a) 25m  | (b) 20cm |
| (c) 25cm | (d) 20m  |

38. The persistence of vision for normal eye is( in seconds)

- |          |          |
|----------|----------|
| (a) 1/16 | (b) 1/8  |
| (c) 1/5  | (d) 1/12 |

## ANSWER KEY

1. B	20. A
2. A	21. C
3. C	22. B
4. B	23. D
5. B	24. C
6. B	25. A
7. B	26. A
8. B	27. D
9. A	28. C
10. C	29. B
11. A	30. C
12. D	31. C
13. B	32. C
14. B	33. B
15. B	34. A
16. A	35. C
17. C	36. C
18. C	37. C
19. A	38. A

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