



WBBSE
MADHYAMIK



CHAPTER 5
LIGHT

STUDY
MATERIAL

CONTENTS

- MCQ
- 1 MARKS QUESTIONS
- 2 MARKS QUESTIONS

C O N T E N T S

- MCQ (58 Questions) 3-23
- 1 MARKS (53 Questions)..... 24-30
- 2 MARKS (Questions)

This is free version. You can download Full version from our website. Click the links given at the end of this PDF.



MCQ

1. When an object is placed between the focus and the center of light in front of a convex lens, the image formed is:

- (a) real and bargain
- (b) real and inverted
- (c) imaginary and search
- (d) imaginary and vice versa

Ans. (c) imaginary and straight.

2. Which of the following is the spelling number of water?

- (a) 1.33
- (b) 1.34
- (c) 1.53
- (d) 1.63

Ans. (a) 1.33

3. Which of the following substances has the highest boiling point?

- (a) of water
- (b) glass

(c) Ruby

(d) Diamond

Ans. (d) Diamond.

4. When a ray of light enters from a rarer medium to a denser medium, then:

(a) turns away from the normal.

(b) turns towards the normal

(c) reflected.

(d) remains unmoved

Ans. (b) turns towards the normal.

5. In which medium the spelling depends :

(a) on the color of light

(b) on the intensity of light

(c) on dimension

(d) none of these

Ans. (a) on the color of light.

6. The image formed by a convex mirror is always-

- (a) real and big
- (b) real and smaller
- (c) virtual and small
- (d) virtual and big

Ans. (c) virtual and small.

7. If the position of the object in a concave mirror is between the focus and the pole, then the image will be -

- (a) real and big
- (b) real and small
- (c) virtual and big
- (d) virtual and small

Ans. (c) Virtual and Vada.

8. The magnification (m) of the image formed by a spherical mirror is negative. This means that the image:

- (a) smaller than the object
- (b) bigger than the object
- (c) reverse

(d) straight

Ans. (c) is the reverse.

9. For a concave mirror, if the size of the object and the image and the distance of the object from the pole and the distance of the image from the pole are both equal, then the object is located.

(a) at the pole

(b) at the focus

(c) at the center of curvature

(d) at infinity

Ans. (c) at the center of curvature.

10. What type of mirror is used for shaving?

(a) Convex

(b) concave

(c) flat

(d) none

Ans. (b) concave

11. The magnification of a concave lens is

- (a) always less than 1
- (b) always greater than 1
- (c) always equal to 1
- (d) both less than 1 or more than 1

Ans. (a) always less than 1.

13. Which lens is there in a normal camera?

- (a) convex lens
- (b) concave lens
- (c) both types
- (d) none

Ans. (a) convex lens

14. iris controls

- (a) the focal length of the eye lens
- (b) opening of the pupil
- (c) the size of the lens of the eye

(d) femoral nerve

Ans: (b) the opening of the pupil.

15. What controls the amount of light that enters the eye?

(a) ciliary muscles and eye lens

(b) ciliary muscles and pupil

(c) Iris and pupil

(d) femoral nerve

Ans. (c) Iris and pupil.

16. Which mirror is used in solar furnaces?

(a) Convex

(b) Concave

(c) Plane

(d) None

Ans. (b) Concave

17. Which mirror is by doctors to inspect inside the throat and teeth?

(a) Concave

(b) Convex

(c) Both types

(d) None

Ans.(a) Concave

18. An object is placed at the center of curvature of a concave mirror. What will be the distance between its pole and the image?

(a) Equal to f

(b) Equal to $2f$

(c) Between f and $2f$

(d) Bigger than $2f$

Ans.

19. Refractive index of water concerning air is $\frac{4}{3}$ then the R.I. of air concerning water will be-

(a) $\frac{2}{1.5}$

(b) $\frac{3}{4}$

(c) $\sqrt{\frac{3}{4}}$

(d) $\sqrt{\frac{4}{3}}$

20. The point of a convex lens from where the ray of light passes the lens without any deviation, is called?

- (a) Focus
- (b) Centre of curvature
- (c) Optical center
- (d) none

Ans.(c) Optical center

21. For a young man of normal vision. the least distance of distinct vision is –

- (a) 25 m
- (b) 25cm.
- (c) 25m
- (d) 2.5 cm

Ans. (b) 25. cm

22. Which lens is used to correct a myopic eye?

- (a) Convex lens
- (b) Cylindrical lens
- (c) Concave lens

(d) None of these

Ans.(c) Concave lens

23. Convex lens is used to correct which type of eye defect?

(a) Myopia

(b) Hypermetropia

(c) a and b both

(d) None of these

Ans. (b) Hypermetropia

24. What is the distance of the far point of a normal eye-

(a) 100 m

(b) 100 cm.

(c) 25 cm.

(d) Infinity

Am. (d) Infinity

25. Which color of light has the maximum wavelength in the visible spectrum? -

(a) Red

(b) Blue

(c) Yellow

(d) Violet

Ans. (a) Red



1 Marks

1. In which part of the eye is the image formed the clearest?

Answer: The image formed at the yellow point is the clearest.

2. What do you understand by the pole of a spherical mirror?

Answer: The midpoint of the reflecting plane of a spherical mirror is called the pole of the mirror.

3. What is the principal axis of a spherical mirror?

Answer: The line joining the pole and the center of curvature of a spherical mirror is called the principal axis of the mirror.

4. In which medium the speed of light is maximum?

Answer: The velocity of light is maximum in a vacuum.

5. To use a convex lens as a magnifying glass, where will the object be placed relative to the lens?

Answer: To use a convex lens as a magnifying glass, the object has to be placed between the focus and the center of the lens.

6. In the spectrum of white light, which color of light deviates the least?

Answer: The deviation of red light is the least in the spectrum of white light.

7. If an object is placed at a distance of $2F$ in front of a convex lens of focal length F , what will be the relation between the size of the object and the size of the image?

Answer: The size of the object and the size of the image will be the same.

8. Is the image formed on the cinema screen real or imaginary?

Answer: The image formed on the cinema screen is real.

9. By which unit is the wavelength of light measured?

Answer: by Angstrom (A)

10. What are the outermost colors of the pure spectrum of white light?

Answer: Violet and Red.

11. By mixing which alphabets are in proper proportion all other alphabets are obtained?

Answer: To the primary classes.

12. Give two uses of lenses in daily life.

Answer: Lenses are used in the manufacture of magnifying glasses and microscopes.

13. Which vision defect occurs when the focal length of the eye lens is reduced?

Answer: Nearsightedness.

14. Which color ray has the minimum wavelength in white light?

Answer: Purple color.

15. What is farsightedness?

Answer: Human eye can see distant objects clearly, but cannot see near objects. The defect of that eye is called farsightedness.

16. Which type of lens is used to correct farsightedness?

Answer: Convex lens.

17. Define refractive index.

Ans. The ratio of the sine of the angle of incidence to the sine of the angle of refraction for any two media and light of a particular color is constant. This constant is called the refractive index for those two mediums.

18. How do lenses form images?

Ans. When the rays of light coming from an object converge or appear to converge after being reflected from the lens, the image of that object is formed.

19. What will be the value of the deviation of a light ray, if it passes through the optical center of a thin lens?

Ans. 0° (zero)

20. Give a natural example of the dispersion of light.

Ans. Rainbow.

21. What are the causes of myopia?

Ans. Causes of myopia (i) Reduction of the focal length of the eye lens. (ii) Elongation of the eyeball.

22. What are the causes of hypermetropia?

Ans. Causes of farsightedness: (i) Increase in the focal length of the eye lens. (ii) Shrinkage of the eyeball.

23. Which part controls the focal length of the eye lens?

Ans. Ciliary muscles.



OUR NOTES

SI No	NOTES	CHARGES	LINK
1	CONCERN ABOUT OUR ENVIRONMENT	99/-	CLICK HERE
2	BEHAVIOUR OF GAS	99/-	CLICK HERE
3	CHEEMICAL CALCULATION	99/-	CLICK HERE
4	THERMAL PHEOMENON	99/-	CLICK HERE
5	LIGHT	99/-	CLICK HERE
6	CURRENT ELECTRICITY	99/-	CLICK HERE
7	RADIOACTIVITY	99/-	CLICK HERE
8	CHEMISTRY (ALL 6 CHAPTERS)	599/-	CLICK HERE

THANK YOU!



RAMADAN TUTORIAL



Click the Above links

