



## Q.1} A] Choose the correct alternatives.

[4]

- i.) The number of spectacle of Amit brothers is +2.5, then he suffering from-----eye defect.  
(A) Near-sightedness (B) Far-sightedness (C) Both A&B (D) Presbyopia
- ii.) The focal length of convex lens is.....?  
(A) Positive (B) Negative (C) Zero (D) None of the above
- iii.) .....unit of power of lens.  
(A) Meter (B) Centimetre (C) Dioptre (D) Pascal
- iv.) A dark fleshy screen behind the cornea is called.....?  
(A) Iris (B) Retina (C) Pupil (D) Optic nerve

## Q.1} B] Name the following.

[2]

- i.) Imaginary line passing through both centre of curvature.
- ii.) The distance between the optical centre and principal focus.

## Q.1} C] Find odd one out.

[2]

- i.) Focal length, Centre of curvature, Object distance, Object height.
- ii.) Peep hole in door, telescope, scanner, kaleidoscope.

## Q.2} Answer the following question.[Any-4]

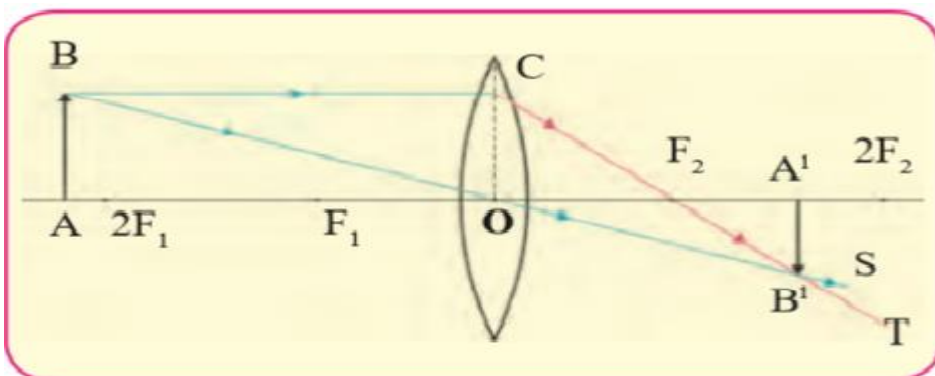
[8]

- i.) Write a short note on 'presbyopia'.
- ii.) Write the uses of concave lens.
- iii.) Distinguish between- concave lens and convex lens.
- iv.) At which position will you keep an object in front of convex lens so as to get image of the same size. As the object? Draw a figure.
- v.) The focal length of a convex lens is 20 cm. What is its power?

## Q.3} Answer the following question.[Any-3]

[9]

- i.) What is the function of iris and the muscles connected to the lens in human eye?
- ii.) Explain the rules with diagram to draw ray diagram of image obtained by convex lens.
- iii.) An object is placed vertically at a distance of 20 cm from a convex lens. If the height of the object is 5 cm and the focal length of the lens is 10 cm, what will be the position, size and nature of the image?  
How much bigger will the image be as compared to the object?
- iv.) Observe the figure and complete the table.



Sr.no.	Points	Answer
i.	Position of the object	
ii.	Position of the image	
iii.	Size of the image	
iv.	Nature of the image	

**Q.4} Answer the following question.(Any-1)**

**[5]**

- i.) Draw a scientifically correct labelled diagram of human eye and answer the question based on it.
- a) Name the type of lens in the human eye.
  - b) Name the screen at which maximum amount of incident light is refracted?
  - c) State the nature of image formed of the object on the screen inside the eye.
- ii.) Explain the working of an astronomical telescope using refraction of light.

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**Best of luck.....**

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