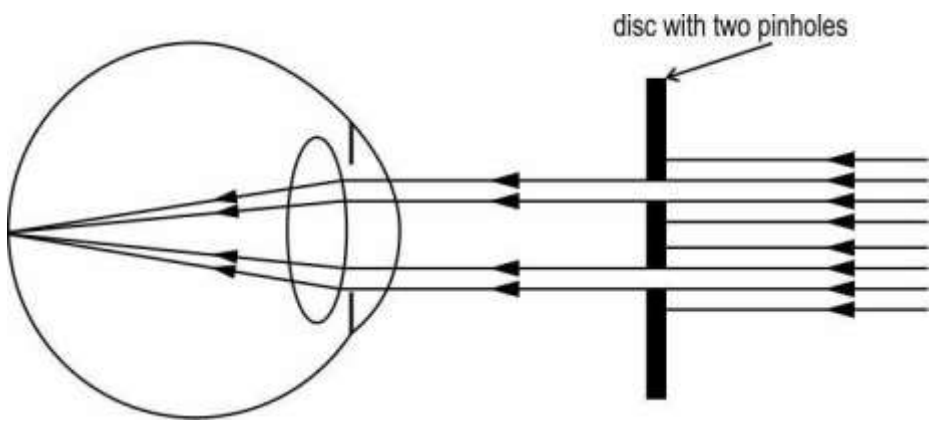


## 7. HUMAN EYE AND COLOURFUL WORLD

Q. No	Question	Marks
<b>Free Response Question/ Subjective Question</b>		
Q.24	<p>An autorefractor, which is used to automatically measure the refractive errors in a person's eye, makes use of the Scheiner principle explained below.</p> <p>Parallel rays of light from a distant object are limited to two parallel bundles of light using a disc with two pinholes. For an eye with no refractive error, the rays would be focused on the retina, where only one spot can be observed.</p>  <p>(a) For a myopic eye, how many spots will be observed on the retina?</p> <p>(b) Draw a diagram showing how the light rays fall on the retina of a myopic eye?</p> <p>(c) What could be the reason for the observation?</p>	3

## Answer Key & Marking Scheme

Q. No	Answers	Marks
Q.24	<p>(a) 2 spots</p> <p>(b)</p> <p>(c) 1 mark for any one of the following:</p> <ul style="list-style-type: none"> <li>-elongation of the eyeball</li> <li>-excessive curvature of the eye lens</li> </ul>	3