

# CLASS VII – SCIENCE – CHAPTER 11

## LIGHT

Name:

Date:

**Q01.** Bouncing back of light in same medium is called

- (a). Refraction                      (b). Reflection                      (c). Rarefaction                      (d). Retardation

**Q02.** When light bounces off a surface, the surface is

- (a). Reflector                      (b). Opaque                      (c). Transparent                      (d). Translucent

**Q03.** A common magnifying glass is an example of

- (a). Concave mirror                      (b). Convex mirror                      (c). Convex lens                      (d). Concave lens

**Q04.** Shaving mirror are usually

- (a). Concave                      (b). Convex                      (c). Plane                      (d). Biconcave

**Q05.** The perpendicular to the reflecting surface is called

- (a). Normal                      (b). Incident rays                      (c). Reflected rays                      (d). Refracted rays

**Q06.** Concave lens is also known as

- (a). Converging lens                      (b). Diverging lens                      (c). Biconcave lens                      (d). Bifocal length

**Q07.** The splitting of white light into seven colours is called

- (a). Spectrum                      (b). Splitting                      (c). Dispersion                      (d). Rainbow

**Q08.** Regular reflection takes place by

- (a). Transparent surface (b). Smooth surface                      (c). Rough surface                      (d). Plane surface

**Q09.** Light is a form of

- (a). Heat                      (b). Temperature                      (c). Energy                      (d). Power

**Q10.** Sky appear red during

- (a). Sunrise and sunset (b). During day                      (c). During early noon                      (d). During noon

**Q11.** Concave lens always forms

- (a). Real image                      (b). Virtual image                      (c). Inverted image                      (d). Magnified image

**Q12.** Mirror used a shaving mirror is

- (a). Convex mirror                      (b). Bifocal mirror                      (c). Concave mirror                      (d). Plane mirror

**Q13.** Which colour of light scattered least

- (a). Red                      (b). Blue                      (c). Green                      (d). Orange

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**Q14.** White light consist of

- (a). 3 colours                      (b). 5 colours                      (c). 7 colours                      (d). 9 colours

**Q15.** Virtual image is always

- (a). Erect and diminished                      (b). Inverted and diminished  
(c). Erect and magnified                      (d). Erect and magnified/diminished.

**Q16.** All the rays of light parallel to principal axis after reflection passes through

- (a). Pole                      (b). Focus  
(c). Radius of curvature                      (d). Mid-point of lens.

**Q01.** Match the following:

### **Column A**

- (a). Real image  
(b). Virtual  
(c). Plane mirror  
(d). Concave mirror  
(e). Convex mirror

### **Column B**

- i. Image behind the mirror  
ii. Image in front of the mirror  
iii. Image is same size as object  
iv. Inverted image  
v. Erect image

### **Column A**

- (a). Rainbow  
(b). Incident angle  
(c). Refracted angle  
(d). Rear view mirror  
(e). Light

### **Column B**

- i. Form of energy  
ii. Convex mirror  
iii. Angle between incident ray and normal  
iv. Angle between refracted ray and normal  
v. Spectrum

### **Column A**

- (a). Concave mirror  
(b). Concave lens  
(c). Convex mirror  
(d). Convex lens  
(e). Prism

### **Column B**

- i. Dispersion of light  
ii. Real and inverted image  
iii. Virtual and erect image  
iv. Rear view mirror  
v. Reflector of solar cooker

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### Column A

- (a). Moon
- (b). Sun
- (c). Brick
- (d). Mirror
- (e). Glow-worm

### Column B

- i. Natural biological luminous
- ii. Non-luminous
- iii. Reflector
- iv. Opaque
- v. Luminous

### Q02. Fill in the blanks

- (a). Bodies which give out their own light are called \_\_\_\_\_.
- (b). Regular reflection takes place from the \_\_\_\_\_ surfaces.
- (c). \_\_\_\_\_ refers to collection of rays.
- (d). \_\_\_\_\_ mirror is used as rear-view mirrors in automobiles.
- (e). White light is composed of many \_\_\_\_\_.
- (f). Convex mirror is used as \_\_\_\_\_ mirror in automobiles.
- (g). A \_\_\_\_\_ refers to a collection of rays.
- (h). \_\_\_\_\_ perpendicular to reflecting surface.
- (i). Incident angle is always equal to \_\_\_\_\_ angle.
- (j). Shadows are formed when light falls on an \_\_\_\_\_ object.

### Q03. Write T for true and F for false statements.

- (a). Light consists of electromagnetic waves.
- (b). Light requires medium for propagation.
- (c). Sun is the ultimate source of light.
- (d). Moon is a luminous body.
- (e). Plane mirror always forms real image.
- (f). Light is a form of energy which cannot be seen.
- (g). Light travels slower than sound.
- (h). Plane mirror is used in periscope.
- (i). Bending of rays of light due to change in medium is called refraction.
- (j). Plane mirror has fixed focal length.

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- Q04.** What is a lens? Write its main types.
- Q05.** Why is a convex mirror used as a rear-view mirror?
- Q06.** Write the difference between reflection and refraction of light.
- Q07.** What is the rectilinear propagation of light?
- Q08.** What is a mirror? Write its different types?
- Q09.** Write the difference between regular and irregular reflection of light.
- Q10.** What is the focal length of a mirror? How does it vary with curvature?
- Q11.** Why does a piece of paper held in sunlight at the focus of a convex lens burn?
- Q12.** Write the difference between concave and convex mirrors?
- Q13.** How is a rainbow formed?
- Q14.** What is a spectrum?
- Q15.** Write the laws of reflection?
- Q16.** Write the difference between real and virtual images?
- Q17.** Rearrange the letters to form meaningful words related to light.
- (a). LETCREFIION      (b). MAIEG      (c). CAVECON      (d). TPECSTRMU  
(e). SENCL
- Q18.** Give one word that means
- (a). Bouncing back of rays of light.  
(b). Band of seven colours obtained on dispersion of white light.  
(c). Mirror used as a rear-view mirror in automobiles.  
(d). Image formed by a plane mirror.  
(e). Sequence of colours of a spectrum.