# CLASS-VIII SCIENCE CHAPTER-16

\*\*\*\*\*\*\*\*\*\*

# Very Short Answer Questions

# Question 1.

Why fingers appear blurred when we move our hand very fast in front of our eyes?

Answer:

This is due to persistence of vision 1/16th of a second.

Question 2.

What makes things visible?

Answer:

When light reaches our eyes after striking an object, we are able to see an object.

Question 3.

Which element is used at the back of plane mirror?

Answer: Silver

Ouestion 4.

The distance between the object and its image formed by a plane mirror appears to be 18 cm. What is the distance between mirror and the object?

Answer:

9 cm

Question 5.

How is hypermetropia corrected?

Answer:

It is corrected by using convex lens.

Question 6.

How is myopia corrected?

Answer:

It is corrected by using concave lens.

Ouestion 7

A ray of light is incident on a mirror at an angle of 40°. What is the angle of reflection?

\*\*\*\*\*

Answer:

40°

4

**Question 8** 

Name a device which works on the principle of multiple reflection.

Answer:

Periscope

\*\*\*\*\*\*\*\*\*\* Question 9. Can we see an object in the dark? Answer: No Question 10. What is the nature of the image formed by the plane mirror? Answer: Virtual and erect Question 11. Where is the image formed in a plane mirror? Answer: Behind the mirror Question 12. The angle between the incident ray and reflected ray is 100°. What is the value of angle of incidence? Answer:  $2i + 2r = 100^{\circ}$ Since, 2i = 2r $2i + 2i = 100^{\circ}$ 2 2 2i = 100°  $2i = \frac{100}{2} = 50$  $\square$  Angle of incidence = 50°. Question 13. What is yellow spot? Answer: It is highly light sensitive spot for seeing things with highest clearness. Question 14. Give an example of night bird. Answer: Owl Question 15. What do we call the image that cannot be obtained on a screen? Answer: Virtual Question 16. Show mathematically, the first law of reflection. Answer: 2i = 2rQuestion 17.

\*\*\*\*\*

Name the phenomenon shown in the figure.

Answer:

Lateral inversion.

Question 18.

Express the mathematical formula to calculate the number of images formed when two mirrors are inclined at  $\theta$  angle.

\*\*\*\*\*\*\*\*\*\*\*

Answer:

Number of images =  $\frac{360^{\circ}}{Angle(\emptyset)} - 1$ .

Question 19.

How many colours are there in a spectrum of white light?

Answer:

Seven

Ouestion 20.

Name the scientist who studied that if a white light is passed through a prism, it splits into different colours.

Answer:

Sir Issac Newton

Question 21.

Name the spot inside the human eye where the image is not visible.

Answer:

4

Blind spot

Question 22.

Name the liquid found between the cornea and lens.

Answer:

Aqueous humour

Question 23.

Name the liquid found between the lens and the retina.

Answer:

Vitreous humour

Question 24.

Define the incident ray.

Answer

The ray of light striking the surface is called an incident ray.

Question 25.

Define angle of reflection.

Answer

The angle between the reflected ray and the normal is called the angle of reflection.

\*\*\*\*\*\*

Question 26.

What is aqueous humour?

Answer:

The space between the cornea and lens is filled with a liquid called the aqueous humour.

\*\*\*\*\*\*\*\*\*\*

# Question 27.

List the characteristics of an image formed in a plane mirror.

### Answer:

he characteristics of an image formed in a plane mirror are:

- It is virtual.
- It is erect.
- It is of same size as the object.

## **Question 28.**

What is irregular reflection?

Answer:

Irregular reflection is defined as the reflection of light from an uneven surface. In irregular reflection, the reflected beam is not parallel.

# Question 29.

State the two laws of reflection.

Answer:

The two laws of reflection are:

- The angle of incidence is always equal to the angle of reflection.
- The incident ray, the reflected ray and normal all lie in the same plane.

# Question 30.

How do we see various objects?

Answer:

We see various objects due to reflection. As we know all surface reflect light, when light falls on any object, it reflects the light. The reflected light reaches our eyes and we are able to see the object.

\*\*\*\*\*

\*\*\*\*\*\*