12

Light

ORAL QUESTIONS

A. Answer these questions orally.

1. What is light?
2. How does light travel?
3. What is the speed of light in vacuum?
4. Name two luminous objects.
5. What is an image which cannot be obtained on a screen called?
6. What is the phenomena of splitting of white light into its seven constituents called?

PUZZLES/QUIZ

B. Find nine terms related to chapter Light hidden in the word-maze given below.

D	L	B	M	C	S	I	A	W	B	L	C
P	I	N	P	O	P	O	L	E	L	R	O
L	G	S	E	N	E	L	M	T	Y	C	N
A	H	N	P	V	C	E	Y	B	G	T	C
N	T	R	C	E	T	D	R	N	R	E	A
E	G	L	R	X	R	B	P	R	F	X	V
M	N	Y	H	L	U	S	R	J	N	H	E
I	E	C	B	E	M	M	I	F	E	X	L
R	D	E	D	N	L	M	S	O	C	A	E
R	Y	P	E	S	T	T	M	C	N	Y	N
O	L	A	M	J	F	R	E	U	O	B	S
R	M	B	R	E	V	R	N	S	R	I	M

C. Unscramble the jumbled words to make meaningful words. Use the clues given in brackets.

1. E N P O S I I S D R _____

(Splitting of white light into its seven constituent colours).

2. | T | E | R | M | P | C | U | S | _____

(A band of seven colours obtained on a screen due to dispersion)

3. | L | A | R | E | _____

(An image which can be formed on a screen)

4. | V | E | A | O | C | C | N | _____

(A mirror whose inner surface behaves as the reflecting surface)

5. | S | U | O | F | C | _____

(The mid point of the pole and the centre of curvature)

CLASS TEST

D. Very short answer questions.

1. What do you understand by reflection of light?

_____

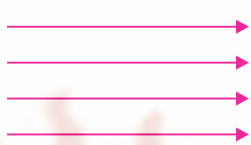
2. How is an image formed?

_____

3. What is a beam of light?

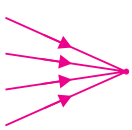
_____

4. What do the following represent?



(a) _____

(b) _____



(c) _____

5. Which mirror is used for making kaleidoscopes and periscopes?

_____

6. What is a curved mirror?

_____

7. What is a concave mirror?

8. What is a convex mirror?

E. Short answer questions.

1. Differentiate between.

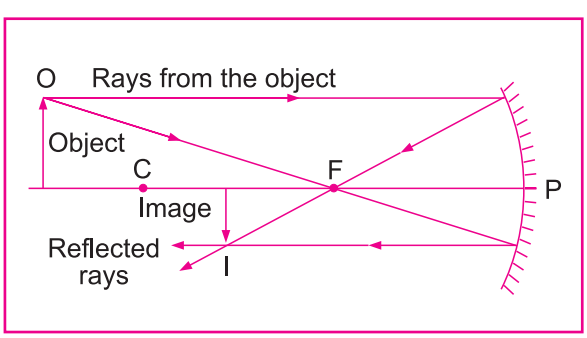
(a) Real image and Virtual image

REAL IMAGE	VIRTUAL IMAGE

(b) Dispersion and Spectrum

DISPERSION	SPECTRUM

2. Study the following diagram and answer the following questions.



(a) What is the position of the object?

(b) What is the position of the image?

(c) What is the nature of the image formed?

(d) What is the size of the image formed larger or smaller than the object?

3. What is the nature, size and position of the image formed by a convex mirror?

4. Where do we mark the focus and centre of curvature for a convex mirror?

5. List the uses of convex mirrors.

6. When is a person advised to use convex lenses in his spectacles?

7. When is a person advised to use concave lenses in his spectacles?

8. What is lateral inversion?

F. Long answer questions.

1. What are the various uses of plane mirrors?

2. List the various uses of concave mirrors.

3. What are the characteristics of an image formed by a plane mirror?

4. List the uses of concave and convex lenses.

5. Draw the ray diagram for a concave mirror when an the object is placed between F and P.

HOME ASSIGNMENT

G. Think and Answer.

1. Jessica saw an ambulance van having the word ƎɔИAJUBMA written as? Why do you think it is written so?

2. Shubhankar's grandfather uses bifocal spectacles. What could be the reason?

3. Shreya placed a lemon in a circular container of water. It appears to be larger than its normal size. Why?

4. Ravi stood in front of a magical mirror. He found that his face was enlarged and the legs appeared very small. What could be the reason?

WORKSHEET

H. Give reasons for the following.

1. A convex lens is also called a converging lens.

2. One should never experiment to focus or concentrate sunlight on a human body.

3. When a Newton's Disc is rotated very fast, white colour is seen.