

INDIAN SCHOOL AL WADI AL KABIR



CLASS: VII	DEPARTMENT: SCIENCE	DATE: 05-12-2024
MARKS: 30	POST - MID TERM ANSWER KEY	DURATION: 1 HOUR

SECTION - A			
1] c) 50 ⁰	1		
2] a) Concave mirror	1		
3] d) Stainless steel		1	
4] b) Yes; it is a reversible physical char	1		
5] ii) Both A and R are true but R is not	1		
6] iii) A is true but R is false	1		
7] iv) A is false but R is true	1		
	SECTION - B		
8] a) All the seven colours combine to n	1		
b) i) Convex mirrors are used as rear-vi			
mobiles such as cars, scooters, trucks an	(Any 2)		
behind.	$\frac{1}{2} + \frac{1}{2}$		
ii) Convex mirrors are used as vigilance			
complexes to keep an eye on customers	and shoplifters, if any.		
iii) Convex mirrors are used as staircase	e-mirrors on the double-decker buses.		
9] a)		(Any 1	
CONVEX LENS	CONCAVE LENS	difference)	
1.Thick at the middle, thin at the edge.	1. Thin at the middle, thick at the edge.	$\frac{1}{2} + \frac{1}{2}$	
2.It can form a magnified image.	2. Image is always diminished in size.		
3.It is also known as convergent lens.	3. It is also known as divergent lens.		

b) Rainbows are formed by the splitting of the white light of the sun through		1
transparent water droplets present in the air. The sunlight splits into seven		
colours of the rainbow.		
10] During Photosynthesis, plants use carbon dioxide and water in the presence		1+1
of sunlight and chlorophyll to form new substances- glucose and oxygen.		
During digestion, various food materials	are broken down to form new	
substances which can be absorbed by the body.		
	SECTION - C	
11] a)		
(a) Concave mirror	(b) Convex mirror	1/2 + 1/2
b) REAL IMAGE	VIRTUAL IMAGE	
i) Image that can be obtained on a screen is called real image i) Image that cannot be obtained on a screen is called virtual image		(Any 1)
ii) Image is always inverted	ii) Image is always erect	$\frac{1}{2} + \frac{1}{2}$
iii) Eg: Pinhole camera.	iii) Eg: Image formed by a plane mirror.	
\mathbf{c}) = 15 – 9 = 6 cm		
= 6 + 6 $= 12 cm$		1/2 + 1/2
12] a) Extraction of metal from ore, production of medicine.		(Any – 2)
2 Ja, 2 Addition of media from ore, production of medicine.		$\frac{1}{2} + \frac{1}{2}$
b) i) It combines with oxygen to form a	new substance called magnesium oxide.	1
ii) Turns red litmus blue. It is basic in nature.		$\frac{1}{2} + \frac{1}{2}$

13] a) The Ozone layer protects us from ultraviolet radiation which comes from	1
the sun. Ozone absorbs ultraviolet radiation and breaks down to form oxygen. If	
not absorbed by ozone, it would reach the earth's surface and cause harm to us	
and other life forms. In this way, the ozone layer absorbs harmful ultraviolet	
radiation.	
b) i) Blue colour changes to green due to the formation of iron sulphate.	$\frac{1}{2} + \frac{1}{2}$
ii) Copper sulphate + Iron → Iron sulphate + Copper	1
SECTION - D	
14] a) The process of separating a pure substance in the form of crystals from a	1
hot saturated solution by cooling is called crystallisation.	
b) When an iron object is left in damp air (or water) for a considerable time, it	
gets covered with a red-brown flaky substance called rust. This is called rusting	
of iron.	1 + 1
Rusting of iron requires contact with water (moisture) and oxygen. By painting	
an iron gate, we prevent the contact between iron, Oxygen and water (moisture),	
this helps in preventing rusting of iron.	
c) i) Evolution of gas / carbon dioxide is formed.	1/2
ii) Due to the formation of calcium carbonate.	1/2
Calcium hydroxide + Carbon dioxide — Calcium carbonate + Water	1
SECTION - E	
15] i) A mirror forms an image such that its left side is object's right side and its	1
right side is object's left side.	
ii) The bouncing back of light with the change in direction is called reflection of	
light.	1
iii) The driver in the other vehicles ahead of the ambulance can see the word	
m) The driver in the other vehicles aread of the amoutance can see the word	
'AMBULANCE' clearly in the rear-view mirror and give way to the ambulance	1
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