

INDIAN SCHOOL MUSCAT

NAME OF THE EXAMINATION	SECOND PERIODIC TEST	CLASS: X
DATE OF EXAMINATION	01-06-2022	SUBJECT: SCIENCE
TYPE	MARKING SCHEME	

SET	Q.NO	VALUE POINTS	MARK
SETA	1	Focal length of a concave mirror is -ve	1
	2	Definition of magnification and its unit.	1/2 + 1/2
	3	The distance between the image and pole is 20cm. (Only magnitude)	1
	4	U = -10cm, m = -3, v = ? M = - v / u, v = -30cm	1/2 + 1/2 1/2 + 1/2
	5	u = -10cm, f = +15cm, v = ? 1/f = 1/v + 1/u, working steps v = +6cm	1/2 + 1/2 1/2 + 1/2
	6	(d) (1)	1
	7	Oxidation , Reduction (1/2 + 1/2)	1
	8	A	1
	9	(a) $\text{MnO}_2 + 4\text{HCl} \rightarrow \text{MnCl}_2 + 2\text{H}_2\text{O} + \text{Cl}_2$ (1) (b) Substance Oxidized: HCl (1/2) Substance Reduced: $\text{MnO}_2$ (1/2)	2
	10	(a) $\text{X} \rightarrow \text{Fe}$ $\text{Y} \rightarrow \text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$ (1/2 + 1/2) (b) Rust (1/2) (c) $4\text{Fe} + 3\text{O}_2 + \text{H}_2\text{O} \rightarrow 2\text{Fe}_2\text{O}_3 \cdot \text{H}_2\text{O}$ (1/2)	2
	11	The mucus protects the inner lining of the stomach from the action of the acid under normal conditions.	1
	12	The villi are richly supplied with blood vessels because the blood take the absorbed food to each and every cell of the body for obtaining energy	1
	13	Liver. Its function is to secrete bile juice, which helps in the emulsification of fats.	1/2 + 1/2

	14	Some other organisms derive nutrition from plants or animals without killing them. Any one example.	1+ 1
<b>SETB</b>	1	Definition of magnification and its unit.	1
	2	The focal length of a convex mirror is +ve.	1
	3	The distance between the image and pole is 20cm. (Only magnitude)	1
	4	U = -10cm, m = -3, v = ? M = - v / u, v = -30cm	1/2 1/2 + 1/2 1/2
	5	u = -10cm, f = +15cm, v = ? 1/f = 1/v + 1/u, working steps v = +6cm Any one nature	1/2 + 1/2 1/2 + 1/2
	6	(c) (1)	1
	7	Oxidation, Reduction (1/2 + 1/2)	1
	8	C (1)	1
	9	(a) $2\text{Fe} + 3\text{H}_2\text{O} \rightarrow \text{Fe}_2\text{O}_3 + 3\text{H}_2$ (1) (b) Oxidizing Agent: $\text{H}_2\text{O}$ (1/2) Reducing Agent: Fe (1/2)	2
	10	(a) X → Copper(Cu) Y → Carbon dioxide( $\text{CO}_2$ ) (1/2 + 1/2 + 1/2) Z → Basic Copper Carbonate $\text{Cu}(\text{OH})_2 \cdot \text{CuCO}_3$ (b) $2\text{Cu} + \text{CO}_2 + \text{O}_2 + \text{H}_2\text{O} \rightarrow \text{Cu}(\text{OH})_2 \cdot \text{CuCO}_3$ (1/2)	2
	11	The hydrochloric acid creates an acidic medium which facilitates the action of the enzyme pepsin.	1
	12	Salivary amylase	1
	13	Small intestine. amino acids, glucose	1/2 + 1/2 + 1/2 + 1/2
	14	(i) The villi are richly supplied with blood vessels because the blood take the absorbed food to each and every cell of the body for obtaining energy. (ii) to allow the cellulose to be digested/ cellulose is hard to digest	1 + 1

SET C	1	Definition of magnification and its unit.	1
	2	The focal length of a convex mirror is +ve.	1
	3	The distance between the image and pole is 20cm. (Only magnitude)	1
	4	U = -10cm, m = -3, v = ? M = - v / u, v = -30cm	$\frac{1}{2} + \frac{1}{2}$ $\frac{1}{2} + \frac{1}{2}$
	5	u = -10cm, f = +15cm, v = ? $\frac{1}{f} = \frac{1}{v} + \frac{1}{u}$ , working steps v = +6cm Any one nature	$\frac{1}{2}$ $\frac{1}{2} + \frac{1}{2}$ $\frac{1}{2}$
	6	(b) (1)	1
	7	Oxidation, Reduction ( $\frac{1}{2} + \frac{1}{2}$ )	1
	8	A (1)	1
	9	(a) $\text{MnO}_2 + 4\text{HCl} \rightarrow \text{MnCl}_2 + 2\text{H}_2\text{O} + \text{Cl}_2$ (1) (b) Substance Oxidized: HCl ( $\frac{1}{2}$ ) Substance Reduced :MnO <sub>2</sub> ( $\frac{1}{2}$ )	2
	10	(a) X → Silver (Ag) Y → Hydrogen Sulphide (H <sub>2</sub> S) Z → Silver Sulphide (Ag <sub>2</sub> S) ( $\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$ ) (b) $\text{Ag} + \text{H}_2\text{S} \rightarrow \text{Ag}_2\text{S} + \text{H}_2$ ( $\frac{1}{2}$ )	2
	11	Pepsin enzyme digests protein.	1
	12	(i) Liver (ii) Pancreas	$\frac{1}{2} + \frac{1}{2}$
	13	The lining of canal has muscles that contract rhythmically in order to push the food forward. This is called peristaltic movement.  amino acids, glucose	1  $\frac{1}{2} + \frac{1}{2}$
	14	(i) Small intestine. It increase the surface area for absorption. (ii) The saliva contains an enzyme called salivary amylase that breaks down starch which is a complex molecule to give simple sugar	$\frac{1}{2} + \frac{1}{2}$