



**INDIAN SCHOOL DARSAIT**  
**MID TERM EXAMINATION- SEPTEMBER 2017**  
**SAMPLE PAPER 1**  
**SCIENCE**

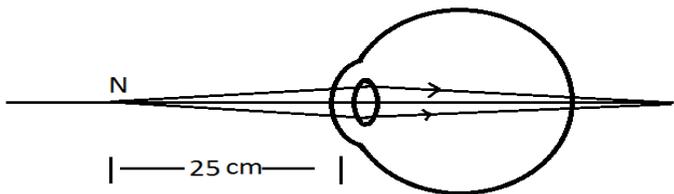


**CLASS: X**

**Max. Marks: 80**  
**Time: 3 hours**

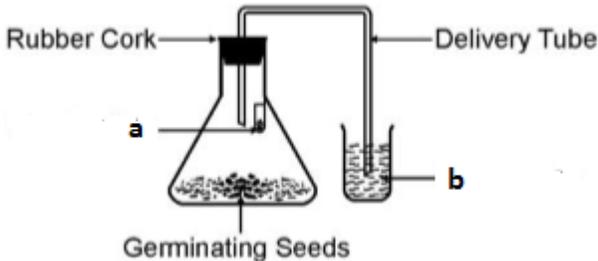
*General Instructions:*

- i) *The question paper comprises of two sections A and B.*
- ii) *All questions are compulsory.*
- iii) *Questions 1 and 2 are very short answer questions and carry 1 mark each.*
- iv) *Questions 3 to 5 are short answer questions and carry 2 marks each.*
- v) *Questions 6 to 14 are long answer questions and carry 3 marks each.*
- vi) *Question number 15 is a value based question of three marks*
- vii) *Questions 16 to 21 are long answer questions and carry 5 marks each.*
- viii) *Question number 22 to 27 are practical based questions and carry 2 marks each.*

SECTION A		
1	Define 1 Diopre.	1
2	What do you mean by the term 'Food web' ?	1
3	Write the balanced chemical equation for the reaction of calcium with water.	2
4	A colourless lead salt when heated produces a yellow residue and brown fumes. (i) Which is the lead salt? (ii) Name the brown fumes. (iii) Write the balanced chemical equation for the reaction.	2
5	What is Ozone? How and where is it formed in the atmosphere? Explain how does it affect an ecosystem.	2
6	The following diagram shows a defect of eye.  (a) Identify the defect. (b) What are its causes? (c) Draw a diagram showing its correction?	3

7	A concave mirror produces three times magnified real image of an object placed at 10cm in front of it. Where is the image located?	3
8	A thin converging lens forms (a) a <i>real magnified</i> image and (b) a <i>virtual magnified</i> image of an object. Write the positions of object in each case and also draw ray diagrams to show image formation in each case.	3
9	(a) What are alloys? (b) Write the composition of the alloy solder. (c) State its property and write one use.	3
10	(a) Write any two physical properties of ionic compounds? (b) Show the formation of Na <sub>2</sub> O by the transfer of electrons.  <b>OR</b>  Explain the refining of copper with a well labelled diagram.	3
11	(a) Complete and balance the following chemical equation: Electricity NaCl + H <sub>2</sub> O $\xrightarrow{\hspace{1cm}}$ ----- + ----- + ----- (b) Name the process and write one use of the products formed.	3
12	Illustrate the various pathways used for breakdown of glucose molecule	3
13	(a) What is reflex action? Give two examples. (b) Explain a reflex arc.  <b>OR</b>  Name the various phytohormones. State one function for each.	3
14	List any three difference between arteries and veins.	3
15	A free eye camp was organized in a village by some doctors. They found that the eyes of old people in the village has receded the near point and the far point also gets reduced.  (a) Name the eye defect from which the people are suffering?  (b) What could be the possible reason of this defect?  (c) What are the benefits to organize such camps in rural areas?	3



20	(a) Why are glomeruli considered as dialysis bags? (b) How is urine produced? (c) Draw a well labeled diagram of a nephron.	5
21	Draw a well labeled diagram of human heart and explain double circulation in human.	5
<b>SECTION B</b>		
22	(a) While performing the experiment of finding the focal length of concave mirror a distant object is taken. Why? (b) What is the focal length of a concave mirror whose radius of curvature is 36 cm?	2
23	(a) You are provided with two glass slabs of different thickness. Which one of them will displace the incident ray laterally more than the other ? (b) What are the precautions to be taken while doing the experiment of refraction through glass slab?	2
24	Zinc metal is placed in (a) copper sulphate solution (b) Aluminium sulphate solution In which case, there will be a reaction happening? What will be your observations? Give reason for your answer.	2
25	Explain how HCl and NaOH react with i) Zn metal ii) Solid sodium carbonate	2
26	Mention in brief how to prepare a stomatal peel slide. Draw a well labelled diagram of the slide observed under microscope.	2
27	Given below is the diagram of the experiment set up to show carbondioxide is given out during respiration. Label 'a' and 'b' in the diagram. Mention any two precautions to be taken during this experiment. 	2