



INDIAN SCHOOL SOHAR
TERM II EXAMINATION (2023-24)
SCIENCE (086)

Total No of Pages: 6

CLASS: VII
DATE:07/03/2024

MAX. MARKS: 80
TIME: 3 HOURS

General Instructions:

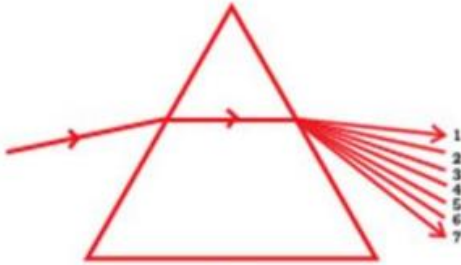
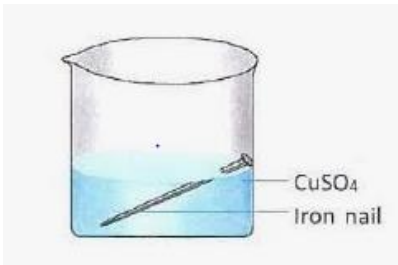
- i. This question paper consists of 39 questions in 5 sections.
- ii. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- iii. **Section A** consists of 20 objective type questions carrying 1 mark each.
- iv. **Section B** consists of 6 very short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.
- v. **Section C** consists of 7 short answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.
- vi. **Section D** consists of 3 long answer type questions carrying 05 marks each. Answers to these questions should be in the range of 80 to 120 words.
- vii. **Section E** consists of 3 source-based/case-based units of assessment of 04 marks each with sub-parts.

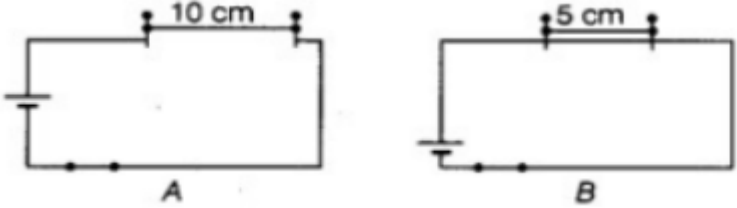
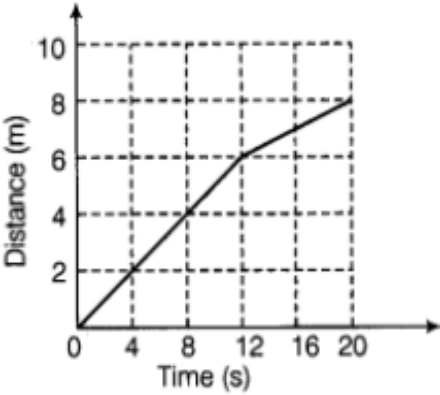
SECTION – A

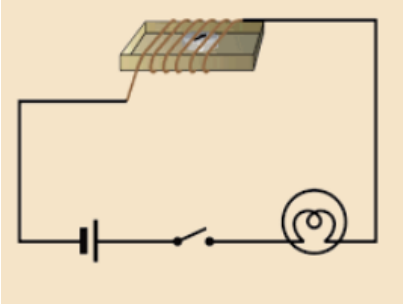
Select and write one most appropriate option out of the four options given for each of the questions 1 - 20

Q.No	Questions	Marks
1	Tina and Tom were given one mirror each by their teacher. Tom found his image to be erect and of the same size whereas Tina found her image erect and smaller in size. This means that the mirrors of Tom and Tina are, respectively (a) Plane mirror and concave mirror (b) concave mirror and convex mirror (c) Plane mirror and convex mirror (d) convex mirror and Plane mirror	1
2	If an object is placed at a distance of 1m in front of a plane mirror, the distance between the object and the image formed by the mirror will be: a) 0.5m b) 4m c)1m d) 2m	1
3	A combination of two or more cells is known as a) filament (b) switch c) battery d) load	1
4	Which of the following is a physical change? (a) Rusting of iron (b) Combustion of magnesium ribbon (c) Burning of candle (d) Melting of wax	1
5	Which of the following statements is incorrect for a chemical reaction? (a) Heat may be given out but never absorbed (b) Sound may be produced (c) A colour change may takes place (d) A gas may be evolved	1
6	Identify the part of the flower that develops into a seed after fertilization. (a) Ovary (b) Ovule (c) Pollen grains (d) Stigma	1
7	Chlorine is used in water treatment plant to (a) change the teste of water (b) prevent evaporation (c) kill the harmful microorganisms (d) prevent sedimentation	1
8	When the soil is too basic, plants do not grow well in it. To improve its quality, what must be added to the soil? (a) Organic matter (b) Quicklime (c) Slaked lime (d) Calamine solution	1

9	Sewage is mainly a (a) liquid waste (b) solid waste (c) gaseous waste (d) mixture of solid and gas	1
10	Products of a neutralisation reaction are always (a) an acid and a base (b) an acid and a salt (c) a salt and water (d) a salt and a base	1
11	Aquatic animals like fish excrete their wastes in gaseous form as (a) oxygen (b) hydrogen (c) ammonia (d) nitrogen	1
12	Choose the statement which is NOT correct in the case of an electric fuse. (a) Fuses are inserted in electric circuits of all buildings. (b) There is a maximum limit on the current which can safely flow through the electric Circuits. (c) There is a minimum limit on the current which can safely flow in the electric circuits. (d) If a proper fuse is inserted in a circuit, it will blow off if the current exceeds the safe limit.	1
13	Period 2005-2015 is being celebrated as the international decade for action on (a) Water for life (b) Education for all (c) Global warming (d) Pollution	1
14	Phenolphthalein is a synthetic indicator and its colours in acidic and basic solutions respectively are (a) red and blue (b) blue and red (c) pink and colourless (d) colourless and pink	1
15	The system of a network of pipes used for taking away wastewater from homes or public buildings to the treatment plant is known as: (a) sewers (b) sewerage (c) transport system (d) treatment plant	1
16	Which among the following is the fluid part of the blood? (a) RBCs (b) Platelets (c) HBCs (d) Plasma	1
<p>Q. no 17 to 20 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below: a) Both A and R are true and R is the correct explanation of A b) Both A and R are true and R is not the correct explanation of A c) A is true but R is false d) A is False but R is true</p>		
17	Assertion (A): Convex mirror is used as a dentist’s mirror. Reason (R): Dentists use spherical mirror to see a magnified image of the teeth.	1
18	Assertion (A): Speed of objects help us to decide which one is moving faster than the other. Reason (R): The SI Unit of speed is m/s.	1
19	Assertion (A): The circulatory system in human consists of heart, blood and blood vessels. Reason (R): The thin walled blood vessels that connect arteries and the veins are called capillaries.	1
20	Assertion (A): Generally, pollen grains do not have a tough protective coat. Reason (R): Pollen grains are light; they can be carried by wind or water.	1
<p>SECTION – B Q. no. 21 to 26 are very short answer questions</p>		
21	Draw a graph for the following: a) A car parked on a side road. b) A car moving with a constant speed.	2

22	<p>Define dispersion of light. State the correct sequence (1-7) of colours in the spectrum formed by the prism as shown in the figure.</p> 	2
23	<p>(i) Kidneys are the major excretory organs in humans. How will the waste products released be excreted if the kidneys are damaged or unfunctional? (ii) Measuring heartbeats is a significant step during health checkups. Name the instrument used for the same.</p>	2
24	<p>Write word equations for the following reactions: (i) Reaction between vinegar and baking soda. (ii) Reaction between carbon dioxide and lime water.</p>	2
25	<p>Rita wrote a food chain in the following way: Frog → Eagle → Insects → Grass → Snake The chain is not in the correct order. Help her to write the food chain correctly.</p>	2
26	<p>(a) Name the blood vessels which carry blood from the heart to the lungs for oxygenation. (b) Mention the range of the pulse rate of a normal human being.</p>	2
<p>SECTION – C Q.no. 27 to 33 are short answer questions.</p>		
27	<p>Give any three differences between a concave and convex lens.</p>	3
28	<p>(a) Define fertilization. (b) Arrange the following in proper sequence: Zygote → Pollination → Embryo → Fertilization OR (a) What is vegetative propagation? (b) What are the four vegetative parts of a plant?</p>	3
29	<p>(i) Name the tissues of a plant that carry (a) water and minerals from the roots to the leaves. (b) food from the leaves to the other parts of the plant. (ii) In a tall tree, which force is responsible for pulling water and minerals from the soil?</p>	3
30	<p>A student took a solution of copper sulphate in a beaker, put a clean iron nail into it, as shown in the figure below, and left it for some hours.</p>  <p>(a) What will happen to the copper sulphate solution? (b) Why are these changes chemical in nature? (c) Write a word equation for the chemical reaction.</p>	3

31	<p>(a) Name two water-borne diseases. (b) Explain vermi-composting toilets.</p>	3
32	<p>(i) Name the device used these days in place of electrical fuses in electrical circuits. (ii) As shown in the circuits below, two wires of 10 cm length and 5 cm length of the same material with the same thickness were connected. The current flowing through both circuits is the same.</p> <div style="text-align: center;">  </div> <p>(a) Will the heat produced in both the cases be equal? Explain. (b) Will the heat produced be the same, if the wires are of equal length but different thickness? Explain.</p>	3
33	<p>Given below is a distance-time graph of the motion of an object.</p> <div style="text-align: center;">  </div> <p>(a) What will be the position of the object at 20 s? (b) What will be the distance travelled by the object in 12 s? (c) What is the average speed of the object?</p>	3
<p>SECTION – D Q.no. 34 to 36 are long answer questions</p>		
34	<p>(a) Name the male and female reproductive parts of a flower and write down any two differences between them. (b) What would happen if all the seeds of a plant were to fall in the same place and grow? (2 points)</p> <p style="text-align: center;">OR</p> <p>(a) Write one similarity and two differences between the sexual and asexual modes of reproduction. (b) Place a piece of bread in a moist and warm place for a few days. Observe it after a few days.</p> <p>(i) Name the organism that grows on the bread piece. (ii) What are the thread-like projections called? (iii) Name the knob-like structure present on the top of the thin stem. (iv) Which type of reproduction does this organism show?</p>	5

35	<p>A circuit is connected as shown below. A compass needle is placed inside the box around which the wire is wound.</p>  <p>(i) What happens, if a bar magnet is brought near the compass needle? (ii) What happens to the compass needle if the switch is put ON? (iii) What does this experiment indicate? (iv) When is a circuit considered to be: (a) closed? (b) open?</p>	5
36	<p>(i) X and Y are two types of organisms that are found in forests. X eats up dead animals, while Y breaks down the bodies of the dead animals into simpler substances. (a) What is the general name of organism X? Write one example of an X-type organism. (b) What is the general name of organism Y? Write one example of a Y-type organism. (ii) How is "canopy" different from "crown"? (iii) Forests are called green lungs. Why?</p>	5
<p>SECTION – E Q.no. 37 to 39 are case - based/data -based questions with 2 to 3 short sub - parts. Internal choice is provided in one of these sub-parts.</p>		
37	<p>One day, Rahul’s mother, after taking a meal, felt pain and acidity in her stomach. Rahul remembered his teacher’s statement and gave his mother some baking soda solution, which gave her relief from pain and irritation of the stomach. (a) What information was given by Rahul’s teacher that helped him select baking soda as a remedy? (b) What will be the color observed when you put the China rose indicator in the baking soda solution? (c) Define the neutralisation reaction.</p> <p style="text-align: center;">OR</p> <p>(c) Write a word equation and a chemical equation for a neutralisation reaction.</p>	4
38	<p>A plane mirror yields a real-looking undistorted image, while a curved mirror may distort, magnify, or reduce the image in various ways, while keeping the lines, contrast, sharpness, colors, and other image properties intact. A mirror is commonly used for inspecting oneself, such as during personal grooming; hence the old-fashioned name "looking glass". This use, which dates from prehistory, overlaps with uses in decoration and architecture. Mirrors are also used to view other items that are not directly visible because of obstructions; examples include rear-view mirrors in vehicles, security mirrors in or around buildings, and dentist's mirrors. Mirrors are also used in optical and scientific apparatus such as telescopes, lasers, cameras, periscopes, and industrial machinery.</p> <p>(a) A shopkeeper wanted to fix a mirror that would give a maximum view of his shop. Which mirror should he use? why? b) Write any two characteristics of an image formed by a plane mirror.</p> <p style="text-align: center;">OR</p> <p>b) How is a real image different from a virtual image?</p>	4

39	<p>Road trips have always fascinated Saima. She had been on many road trips with her parents. On such journeys, she always took the window seat to have a view of the trees, green fields, roads, and other interesting things that came along the way. She loved the fact that these journeys gave her the chance to be with her family and chat with them for hours. Recently, Saima's teacher taught her about "motion and time," and so, on one such journey, she sat behind her father and observed the odometer of the car. She took note of the odometer reading at the start of the journey, which was 56370 km, and then every one hour at 56450 km, 56570 km, and 56640 km, respectively.</p> <p>(a) How much distance is travelled by Saima in two hours from the start of his journey? (b) Which meter records the distance travelled by the vehicle? (c) What is the speed of the car between the second and the third hour of the journey?</p> <p style="text-align: center;">OR</p> <p>(c) What is the average speed of the car after three hours of journey?</p>	4
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