



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



TERM 1 EXAM 2026-27 SCIENCE (SET I)

Class: VIII

Date: 31.08.26

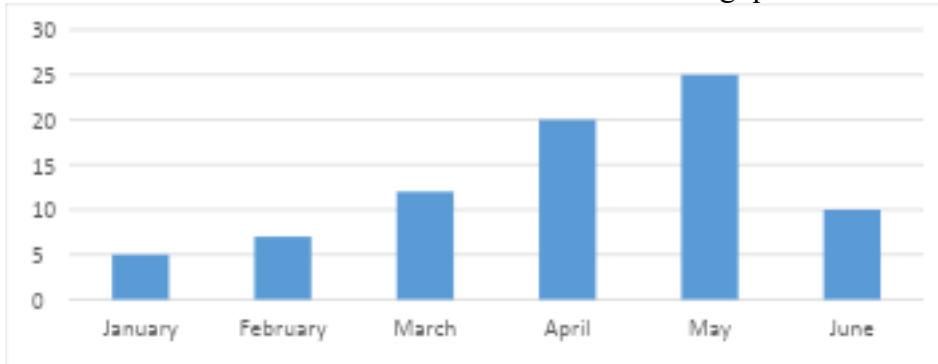
Time: 3 hours

Max Marks: 80

General Instructions:

- (i) This question paper consists of 39 questions in 3 sections. Section A is Biology, Section B is Chemistry and Section C is Physics.
- (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.

Section-A BIOLOGY		
1	Who first used the term 'cell' after observing a cork under a microscope? a) Antonie van Leeuwenhoek b) Robert Hooke c) Louis Pasteur d) Robert Koch	1
2	Which of the following is the control centre of the cell? a) Cytoplasm b) Cell wall c) Nucleus d) Vacuole	1
3	Which of the following is present only in plant cells and provide rigidity? a) Nucleus b) Cell wall c) Vacuole d) Cell membrane	1
4	Which of the following best describes the three pillars of good health? a) Physical fitness, mental strength, and a disease free body b) Physical well- being, mental well- being, and social well- being c) Exercise, diet, and sleep d) Hygiene, vaccination, and medicine	1
5	Which of these is an example of a sign of a disease? a) Headache b) Fever measured with a thermometer c) Tiredness d) Dizziness	1
6	What is ascariasis caused by? a) Bacteria b) Virus c) Parasitic worms d) Protozoa	1
7	Which disease is transmitted through contaminated water and food? a) Chicken pox b) Measles c) Hepatitis A d) Tuberculosis	1

The following two questions consist of two statements – Assertion (A) and Reason (R). Answer these questions by 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.		
8	Assertion (A): Microorganisms cannot be seen with the naked eye. Reason (R): A microscope is used to observe microorganisms.	1
9	Assertion (A): A balanced diet is essential for good health. Reason (R): It provides all the nutrients required by the body in the right amounts.	1
10	List the levels of biological organisation in a human body, starting from the smallest unit.	2
11	Name two organelles in a plant cell and their functions.	2
12	What precautions can you take to stop the spread of malaria in your community?	2
13	Observe the given image and answer the following questions: (a) Why is there a white layer deposited on the fruit? (b) Is the fruit shown in the image fit for consumption? Why or why not?  OR Sara dug a pit in her garden. She started discarding kitchen waste in the pit and covered it with soil. She continued doing this for a few weeks. After some weeks, she planted a small rose sapling in the same place. A few weeks later, she observed that the sapling had grown well. How could a sapling grow well in a place where waste was discarded?	3
14	The graph given alongside shows the number of cholera cases reported in a town for over six months. Observe it and answer the following questions: 	3

	(a) In which month did the highest number of cholera cases occur? (b) Why do you think the cases increased that month? (c) Suggest two steps the local authorities could take to prevent such outbreaks.	
15	Read the following passage and answer the questions: Neha prepared idli batter by mixing rice and urad dal and left it overnight. The next morning, she noticed that the batter had risen and become soft. Her mother explained that tiny microorganisms had helped in this process. Later, Neha learned that some microorganisms are beneficial, while others can cause diseases. Answer the following questions: a) What are the tiny living organisms that cannot be seen with the naked eye called? 1 b) Name the microorganism responsible for making the idli batter rise. 1 c) Explain how yeast helps in making the idli batter soft and fluffy. 2 OR c) Mention two beneficial uses of microorganisms other than making idli batter. 2	
16	Write a short note on non- communicable diseases and ways to prevent them. 5 OR Explain how antibiotic- resistant bacteria are formed.	
Section-B Chemistry		
17	Which of the following is an example of a scientific observation? 1 a) Plants will grow taller next week. b) The water in the beaker is colourless. c) I think the experiment will fail. d) The result may be correct.	
18	Why is a hypothesis important in a scientific investigation? 1 a) It proves the experiment is correct. b) It helps scientists make a testable prediction. c) It replaces the need for observations. d) It is the final answer to the investigation	
19	Which of the following instruments is most suitable for measuring the volume of a liquid accurately? 1 a) Measuring cylinder b) Thermometer c) Spring balance d) Stopwatch	
20	Which property of particles of matter explains why sugar dissolves completely in water? 1 a) Particles have spaces between them. b) Particles have no mass. c) Particles do not move. d) Particles are visible to the naked eye.	
21	Which state of matter has a definite volume but no definite shape? 1 a) Solid b) Liquid c) Gas d) Plasma	

22	Which of the following changes involves the conversion of a solid directly into a gas? a) Melting b) Evaporation c) Sublimation d) Condensation	1
23	Which of the following will diffuse the fastest at room temperature? a) Sand in water b) Ink in water c) Perfume in air d) Salt in oil	1
The following question consists of two statements – Assertion (A) and Reason (R). Answer these questions by 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.		
24	Assertion (A): Solids have a fixed shape. Reason (R): The particles in solids are closely packed and held together by strong forces of attraction.	1
25	A student observes that the smell of incense sticks spreads throughout the classroom within a few minutes. Explain this observation by giving any two reasons.	2
26	Distinguish between observation and inference by giving any three differences.	3
27	Explain any three differences between solids and gases based on the particulate nature of matter. OR The diagram shows three containers labeled A, B, and C. Container A shows particles in a regular, closely packed grid. Container B shows particles in a disordered, closely packed arrangement. Container C shows a few widely spaced particles. Study the diagrams showing the arrangement of particles in three containers. a) Identify the state of matter represented by A, B, and C. b) Which container has the highest force of attraction between particles? Explain why. c) If Container B is heated continuously, predict the change that will occur and explain it using the particulate nature of matter	3
28	<u>Based on the below passage, answer the following questions:</u>	

	Rohan sprayed room freshener in one corner of his classroom. Within a short time, students sitting at the other end of the classroom could also smell the fragrance.	1
	a) Name the process responsible for the spreading of the fragrance.	1
	b) Which property of particles of matter is demonstrated by this activity?	2
	c) Why does the fragrance spread faster on a warm day than on a cold day?	
29	A group of students wants to investigate whether warm water dissolves sugar faster than cold water. Describe how they should carry out the investigation using the scientific method. OR Describe the scientific method used to investigate a problem. Explain each step with a suitable example	5
Section-C Physics		
30	Which of the following applications does NOT use an electromagnet? (a)An MRI machine (b)A maglev train (c)An electric bell (d)An electric iron	1
31	What does the pressure at a point in a liquid depend on? (a)Area of the container (b) Shape of the container (c) Height of the liquid column below the point (d) Height of the liquid column above the point	1
The following question consists of two statements – Assertion (A) and Reason (R) . Answer these questions by 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.		
32	Assertion (A): A charged object can exert a force on another charged or uncharged object even without touching it. Reason (R): Electrostatic force is a non-contact force that acts at a distance.	1
33	What is the heating effect of electric current? Explain the cause of heating effect of electric current	2
34	A sharp knife cuts better than a blunt one. Give reason	2
35	Draw and label the diagram of the Voltaic cell. How does the Voltaic cell work?	3
36	Define an electromagnet. State three factors that affect the strength of an electromagnet	3

37	Differentiate between Magnetic and Gravitational forces.	3
38	Read the following passage and answer the questions: When salt is added to water, the water becomes denser, meaning its particles are packed more closely together than in regular water. Because of this increased density, salt water exerts a greater upward force (buoyant force) on objects, allowing them to float. This shows that one of the key factors affecting whether an object floats or sinks is the density of the liquid in which it is placed. a. Why does salt water have a greater density than ordinary water? 1 b. Why do objects float more easily in salt water than in fresh water? 1 c. What is buoyant force? How does salt water affect it? 2 or d. State one factor that affects whether an object floats or sinks. Explain briefly. 2	
39	(a) What is Pressure? Write S.I unit of Pressure (b) An elephant is standing on four feet. The total area covered by all four feet is 0.80 m². Calculate the pressure exerted by the elephant on the ground if its weight is 20,000 N. or (a) Why school bags are provided with wide straps? (b) A boat has a base area of 6 m². Four persons can sit in it. If each person has a weight of 600 N, find out the pressure exerted on the base of the boat when four persons are sitting in it.	5

*****ALL THE BEST*****