



**INDIAN SCHOOL SOHAR**  
**TERM I EXAMINATION (2022 - 23)**  
**SCIENCE (086)**

**CLASS: VIII**  
**DATE: 29/09/2022**

**MAX MARKS: 40**  
**TIME: 2 HOURS**

**General Instructions:**

- (i) The question paper comprises of four sections A, B, C and D. There are 21 questions in the question paper. All questions are compulsory.
- (ii) Section A: Question no. 1 to 8 are of one mark each. These are very short answer questions and assertion - reason type questions.
- (iii) Section B: Question no. 9 to 15 are competency based questions that consist of multiple choice questions of one mark each and case based questions of 4 marks each.
- (iv) Section C: Question no. 16 and 17 are short answer type questions, carrying 2 marks each.
- (v) Section D: Question no. 18 to 21 are long answer type I questions, carrying 3 marks each.
- (vi) There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.

Q.No.	SECTION A	Marks
1.	After consuming stale mutton curry, a person complained of nausea, vomiting, diarrhoea and pain in the abdomen. i) What is the name given to this condition? ii) What causes this condition?	1
2.	Which crop is generally grown between two cereal crops in crop rotation to restore the fertility of soil?  <b>OR</b> What are the chemical substances rich in particular plant nutrients called?	1
3.	An element forms an oxide which is basic in nature. State whether the element is a metal or a non-metal.	1
4.	Name the cell in human body which can change its shape.  <b>OR</b> Which part of plant cell gives shape and rigidity to it?	1
5.	Name the thermoplastic used for manufacturing toys and combs.	1

**Assertion-Reason type questions**





The following questions consist of two statements one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv).

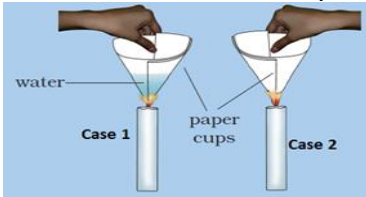
- i) Both A and R are true and R is the correct explanation of A.
- ii) Both A and R are true but R is not the correct explanation of A.
- iii) A is true but R is false.
- iv) A is false but R is true.

6.	<b>a) Assertion:</b> Communicable diseases can spread through air, water and vector. <b>Reason:</b> Microbial diseases like AIDS transmit through casual physical contact such as handshake and hug.  <b>OR</b> <b>b) Assertion:</b> Antibiotics are effective against diseases caused by viruses. <b>Reason:</b> Antibiotics kill or stop the growth of pathogens.	1
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7.	<b>Assertion:</b> The earthworms are considered as farmer's friend. <b>Reason:</b> Earthworms help the breakdown of complex organic matter and loosening of soil.	1
8.	<b>Assertion:</b> Burning of coal and diesel releases sulphur dioxide gas. <b>Reason:</b> Sulphur dioxide gas is an extremely suffocating and corrosive gas.	1

**SECTION B**

9.	Meena found that woollen blankets are expensive as it is made from natural fibre. She wanted a blanket which is similar to woollen blanket, but cheaper. Suggest her suitable blanket to buy. a) Nylon blanket b) Acrylic blanket c) Polythene blanket d) Polyester blanket	1																				
10.	When zinc reacts with dilute sulphuric acid, a salt is formed with the release of a gas. When a burning match stick is brought near the mouth of the test tube, the gas burns with a pop sound. Identify the gas. a) Carbon dioxide b) Oxygen c) Sulphur dioxide d) Hydrogen	1																				
11.	The agricultural practice shown in the picture, depicts the separation of which of the following:  a) Grains from stubs b) Grains from chaff c) Weeds from grain d) Grains from insects	1																				
12.	The properties of metals are shown in the following diagrams X, Y and Z.    X, Y and Z are respectively <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>X</th> <th>Y</th> <th>Z</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>Density</td> <td>Malleability</td> <td>Sonority</td> </tr> <tr> <td>b)</td> <td>Sonority</td> <td>Ductility</td> <td>Malleability</td> </tr> <tr> <td>c)</td> <td>Density</td> <td>Sonority</td> <td>Ductility</td> </tr> <tr> <td>d)</td> <td>Malleability</td> <td>Ductility</td> <td>Solubility</td> </tr> </tbody> </table>		X	Y	Z	a)	Density	Malleability	Sonority	b)	Sonority	Ductility	Malleability	c)	Density	Sonority	Ductility	d)	Malleability	Ductility	Solubility	1
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d)	Malleability	Ductility	Solubility																			
13.	<b>Read the following source and answer the following questions:</b> Soon after Anton Van Leeuwenhoek invented the microscope, Robert Hooke in 1665 observed a piece of cork under the microscope and found it to be made of small compartments which he called "cells. In 1672, Leeuwenhoek observed bacteria, sperms and red blood corpuscles, all of which were cells. Leeuwenhoek (1674), with the improved microscope, discovered the free living cells in pond water for the first time. Much later, in 1831, Robert Brown, an Englishman observed that all cells had a centrally positioned body which he termed as nucleus.  i) A student observed a temporary mount of human muscle cells. What would be the shape of the cells he observed under the microscope. a) Spherical b) Oval c) Spindle d) Cubical	1x4=4																				

	<p>ii) Which one of the following component is common for these three cells (plant cell, animal cell and bacterial cell)?</p> <p>a) Chloroplast b) Cell wall c) Nucleus d) Cell Membrane</p> <p>iii) Nitika has brown coloured eyes like her father. Which of the following is responsible for this?</p> <p>a) Mitochondria b) Gene c) Cytoplasm d) Nucleus</p> <p>iv) There is a huge variation observed in the size of different cells. The largest known cell in the living world is:</p> <p>a) Egg of hen b) Egg of an ostrich c) White blood cell d) Muscle cell</p>	
14.	<p><b>Read the following passage and answer the following questions:</b></p> <p>Viet Tran and Seth Robertson, two engineering students in the US, invented a new type of fire extinguisher in 2015 that uses sound waves to put out fires. Sound energy is transmitted through air by the vibrations of the air molecules. This implies that sound waves could be used to move around or manipulate matter. Tran and Robertson found that sound of low frequencies-between 30 Hz and 60 Hz-can extinguish a small fire.</p> <p>i) 'X' is an excellent fire extinguisher and most suitable for oil, petrol and electrical fires. It also forms a blanket around the fire and brings down the temperature of the fuel. Identify 'X'.</p> <p>ii) The picture below shows two cases in which a person is trying to burn the paper cup. In case 1, the cup has water in it and in case 2, it is empty and dry. Identify in which of the cases the paper will not burn instantly? Give reason for the same.</p>  <p>iii) Anita's mother was heating oil to fry potato chips. The cooking oil all of a sudden caught fire. She poured water to extinguish the fire. Do you think this action was suitable? Justify.</p>	<p>1</p> <p>1</p> <p>2</p>
15.	<p><b>Read the following case and answer the following questions:</b></p> <p>During the summer holidays, Reena went to her grandmother's house. She saw her grandmother cleaning the old and tarnished metal vessels with lemon juice which had dull green coating over them and lost their shiny brown surface. She stood there and observed the change in appearance of the vessels taking place while grandmother was cleaning. Reena was inquisitive to know more about it. Her grandmother explained to her the nature and properties of the vessels.</p> <p>i) Identify the metal of which these vessels are made from?</p> <p>ii) Write the chemical equation involved in the above reaction.</p> <p>iii) Why is grandmother cleaning the vessels with lemon juice? What is the nature of green compound formed?</p>	<p>1</p> <p>1</p> <p>2</p>
<b>SECTION C</b>		
16.	<p>In an experiment 3 kg of coal was completely burnt. The heat produced was measured to be 81000 kJ. Calculate the calorific value of the fuel.</p> <p style="text-align: center;"><b>OR</b></p>	2

	<p>i) Which zone of a flame does a goldsmith use for melting gold and silver and why?</p> <p>ii) If the clothes of a person catch fire, he is wrapped in blanket to extinguish fire. Give reason.</p>	
17.	<p>i) What would happen if fresh crop is stored without drying and why?</p> <p>ii) Name one weedicide and the precaution farmers must take during its application.</p>	2
<b>SECTION D</b>		
18.	<p>i) Write the chemical equation for the following reactions:</p> <p>a) Burning of Magnesium ribbon</p> <p>b) Rusting</p> <p>ii) Name the non-metal present in the following compounds:</p> <p>a) Aluminium chloride</p> <p>b) Zinc oxide</p> <p style="text-align: center;"><b>OR</b></p> <p>i) Which non-metal is used in water purification process to make drinking water germ-free?</p> <p>ii) Give reasons for the following :</p> <p>a) Sodium and potassium are stored in kerosene.</p> <p>b) Copper cannot displace zinc from its salt solution (zinc sulphate solution)</p>	3
19.	<p>i) What are the names given to the arrangements of monomer units found in thermoplastics and thermosetting plastics?</p> <p>ii) Sometimes, natural fibres are mixed with synthetic fibres to make blended fabrics. Which two fibres make fabric polycot?</p> <p>iii) Arun goes for mountaineering with some selected students of his batch. Initially, he is scared of it. His trainer tells him that he should be strong. He provides him a strong climbing rope and teaches him how to climb a mountain. Name the fibre which is used in making this climbing rope.</p> <p style="text-align: center;"><b>OR</b></p> <p>i) Firefighters' uniform is coated with a plastic that is fire resistant. Which is that fire proof plastic and why?</p> <p>ii) Sonu wants to buy shirts for summer. Should he buy cotton shirts or shirts made from synthetic material? Advise Sonu by giving reason.</p>	3
20.	<p>The mosquito <b>P</b> is a carrier of virus and spreads a disease <b>Q</b>. Another mosquito <b>R</b> is the carrier of protozoan <b>S</b> and spreads a protozoan disease <b>T</b>.</p> <p>i) Name (a) mosquito P, and (b) disease Q</p> <p>ii) Name (a) mosquito R (b) protozoan S, and (c) protozoan disease T.</p> <p>iii) Mention any one measure which controls the disease caused by mosquito.</p>	3
21.	<p>X and Y are the two types of cells. The cells X have a well organised nucleus which is separated from the cytoplasm by the nuclear membrane. On the other hand, cells Y do not have a real nucleus, the nuclear material is scattered in the cytoplasm.</p> <p>i) What type of cells are X and Y?</p> <p>ii) Give one example each of X and Y.</p> <p>iii) Some small coloured bodies are present in the cytoplasm of X cell. What is the general name of these bodies?</p>	3

