

**KENDRIYA VIDYALAYA SANGATHAN, LUCKNOW REGION**  
**SESSION ENDING EXAM, 2022-23**  
**CLASS: VIII SUBJECT: SCIENCE**

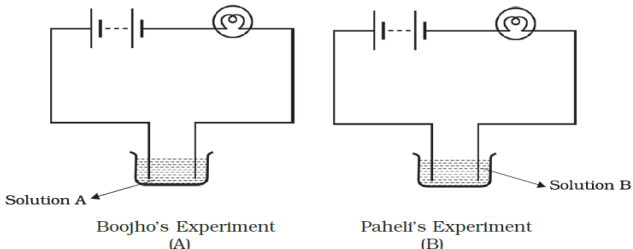
**TIME - 2:30 Hrs.**

**MAX MARKS: 60**

**GENERAL INSTRUCTIONS:**

- i. This question paper consists of questions in 4 sections A, B, C, D and E.
- 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 8 objective type questions carrying 01 mark each.
- iv. Section B consists of 5 very short questions carrying 02 marks each. Answer to these questions should be in the range of 30 to 50 words.
- v. Section C consists of 4 short questions carrying 03 marks each. Answer to these questions should be in the range of 50 to 80 words.
- vi. Section D consists of 3 long questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
- vii. Section E consists of 3 Case Based Units of Assessment of 05 marks each with sub-parts.

**SECTION - A**

1	<p>Boojho and Paheli performed experiment taking similar bulbs and cells but two different solutions A and B as shown below in Fig.14.1. They found that the bulb in the setup A glows more brightly as compared to that of the setup B. You would conclude that</p>  <p style="text-align: center;">Fig. 14.1</p> <p>(a) Higher current is flowing through the circuit in setup A.          (b) Higher current is flowing through the circuit in setup B.          (c) Equal current is flowing through both the circuits.          (d) The current flowing through the circuits in the two setups cannot be compared in this manner.</p>	1
2	<p>Two methods of irrigation which conserve water are</p> <p>(a) Moat and chain pump (c) sprinkler system and drip irrigation          (b) Dhekli and rahat (d) rahat and sprinkler system</p>	1
3	<p>Carrier of malaria-causing protozoan is</p> <p>(a) Female Anopheles mosquito (c) Housefly          (b) Cockroach (d) butterfly</p>	1
4	<p>Sound can travel through</p> <p>(a) gases only (b) solids only (c) liquids only (d) solids, liquids and gases</p>	1
5	<p>The petroleum product used for surfacing of roads is</p> <p>(a) Diesel (c) Lubricating oil          (b) Paraffin wax (d) Bitumen</p>	1
6	<p>When a glass rod is rubbed with a piece of silk cloth, the rod</p> <p>(a) and the cloth both acquire positive charge.          (b) becomes positively charged while the cloth has a negative charge.          (c) and the cloth both acquire negative charge.          (d) becomes negatively charged while the cloth has a positive charge.</p>	1
7	<p>Reproductive age in women starts when their</p> <p>(a) menstruation starts. (c) breasts start developing          (b) body weight increases. (d) height increases.</p>	1

8	Image formed by a plane mirror is (a) virtual, behind the mirror and enlarged. (b) virtual, behind the mirror and of the same size as the object. (c) real at the surface of the mirror and enlarged. (d) real, behind the mirror and of the same size as the object.	1
9	<b>SECTION – B</b> Identify the parts which vibrates to produce in the following : (a) Dholak (b) Sitar (c) Mosquito (d) Flute	2
10	State the laws of reflection.	2
11	Explain why a charged object loses its charge if we touch it with our hand. <b>OR</b> Name the scale on which the destructive energy of an earthquake is measured. An earthquake measures 3 on this scale. Would it be recorded by a seismograph? Is it likely to cause much damage?	2
12	What is menstruation? Explain.	2
13	Is it safe for the electrician to carry out electrical repairs outdoors during heavy downpour? Explain.	2
14	<b>SECTION – C</b> A pendulum oscillates 60 times in 3 seconds. Find its frequency and time period.	3
15	Define adolescence. List any four changes in the body that take place at puberty.	3
16	(a) What is electroplating? (b) Prepare a list of four objects around you that are electroplated.	3
17	Write 'True' against true and 'False' against false in the following statements. (a) Earthquakes can be predicted in advance. (b) Like charges attract each other. (c) A copper rod cannot be charged easily by friction.	3
18	<b>SECTION – D</b> Draw a neat diagram of human eye and label the following parts: Retina, Iris, Crystalline lens, Cornea <b>OR</b> List any five ways to take care of your eyes.	5
19	(a) What do you understand by earthing? (b) Suggest three measures to protect ourselves from lightning.	2 3
20	Give one word: (a) The term used for secretion of endocrine glands. (b) Male sex hormone (c) Protruding voice box in boys (d) Hormone released from pancreas (e) The endocrine gland that secretes thyroxine <b>OR</b> Write short notes on sex determination in the unborn baby in humans.	5
21	<b>SECTION – E</b> The preparation of soil is the first step before growing a crop. One of the most important tasks in agriculture is to turn the soil and loosen it. This allows the roots to penetrate deep into the soil. The loose soil allows the roots to breathe easily even when they go deep into the soil. Why does the loosening of soil allow the roots to breathe easily? The loosened soil helps in the growth of earthworms and microbes present in the soil. These organisms are friends of the farmer since they further turn and loosen the soil and add humus to it. But why the soil needs to be turned and loosened? You have learnt in the previous classes that soil contains minerals, water, air and some living organisms. In addition, dead plants and animals get decomposed by soil organisms. In this way, various nutrients in the dead organisms are released back into the soil. These nutrients are again absorbed by plants. Since only a few centimetres of the top layer of soil supports plant growth, turning and loosening of soil brings the nutrient-rich soil to the top so that plants can use these nutrients. Thus, turning and loosening of soil is very important for cultivation of crops. The	

	<p>process of loosening and turning of the soil is called tilling or ploughing. This is done by using a plough. Ploughs are made of wood or iron. If the soil is very dry, it may need watering before ploughing. The ploughed field may have big clumps of soil called crumbs. It is necessary to break these crumbs. Levelling the field is beneficial for sowing as well as for irrigation. Levelling of soil is done with the help of a leveller. Sometimes, manure is added to the soil before tilling. This helps in proper mixing of manure with soil. The soil is moistened before sowing.</p> <p><b>Read the above passage carefully and answer the following questions:</b></p> <p>(i) Name the organism widely known as friend of farmers.</p> <p>(ii) What do you mean by ploughing?</p> <p>(iii) Why is manure sometimes added to the soil before the process of tilling?</p> <p>(iv) Write two importance of turning the soil and loosening it.</p>	<p>1</p> <p>1</p> <p>1</p> <p>2</p>
22	<p>Natural gas is a very important fossil fuel because it is easy to transport through pipes. Natural gas is stored under high pressure as compressed natural gas (CNG). CNG is used for power generation. It is now being used as a fuel for transport vehicles because it is less polluting. It is a cleaner fuel. The great advantage of CNG is that it can be used directly for burning in homes and factories where it can be supplied through pipes. Such a network of pipelines exists in Vadodara (Gujarat), some parts of Delhi and other places. Natural gas is also used as a starting material for the manufacture of a number of chemicals and fertilisers. India has vast reserves of natural gas. In our country, natural gas has been found in Tripura, Rajasthan, Maharashtra and in the Krishna Godavari delta.</p> <p><b>Read the above passage carefully and answer the following questions:</b></p> <p>(i) Name two states where natural gas is found in India.</p> <p>(ii) Why is natural gas called ideal fuel?</p> <p>(iii) Write the full form of CNG.</p> <p>(iv) Write two uses of natural gas.</p>	<p>1</p> <p>1</p> <p>1</p> <p>2</p>
23	<p>Our atmosphere has 78% nitrogen gas. Nitrogen is one of the essential constituents of all living organisms as part of proteins, chlorophyll, nucleic acids and vitamins. The atmospheric nitrogen cannot be taken directly by plants and animals. Certain bacteria and blue green algae present in the soil fix nitrogen from the atmosphere and convert it into compounds of nitrogen. Once nitrogen is converted into these usable compounds, it can be utilised by plants from the soil through their root system. Nitrogen is then used for the synthesis of plant proteins and other compounds. Animals feeding on plants get these proteins and other nitrogen compounds. When plants and animals die, bacteria and fungi present in the soil convert the nitrogenous wastes into nitrogenous compounds to be used by plants again. Certain other bacteria convert some part of them to nitrogen gas which goes back into the atmosphere. As a result, the percentage of nitrogen in the atmosphere remains more or less constant.</p> <p><b>Read the above passage carefully and answer the following questions:</b></p> <p>(i) What percentage of nitrogen is present in our atmosphere?</p> <p>(ii) Name a micro-organism which can fix atmospheric nitrogen in the soil.</p> <p>(iii) List two uses of nitrogen.</p> <p>(iv) What happens to plants and animals after their death?</p>	<p>1</p> <p>1</p> <p>1</p> <p>2</p>