



INDIAN SCHOOL SOHAR
TERM II EXAMINATION (2023-24)

CLASS: VIII
DATE: 03/03/2024

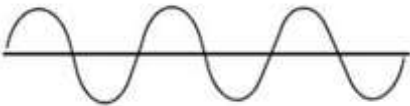
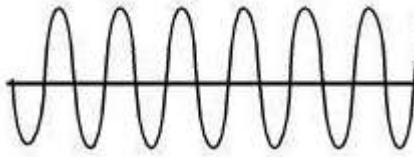
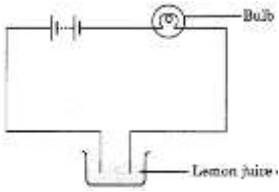
SCIENCE

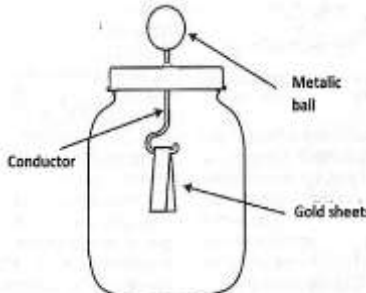
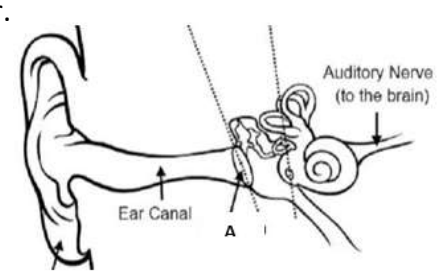
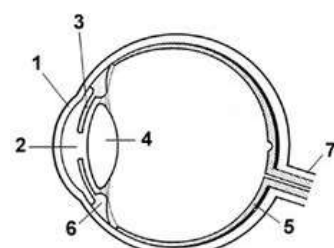
MAX. MARKS: 80
TIME: 3 HOURS

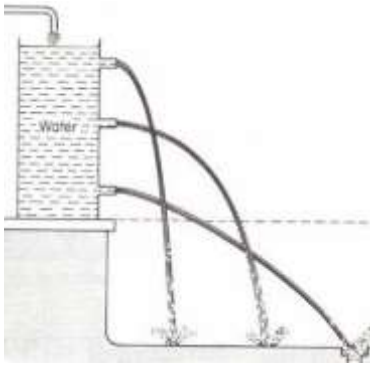






























General Instructions:

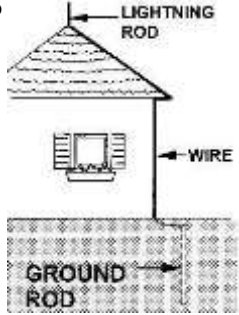
- This question paper consists of 39 questions in 5 sections.
- All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- **Section A** consists of 20 objective type questions carrying 1 mark each.
- **Section 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.
- **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.
- **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.
- **Section E** consists of 3 source-based/case-based units of assessment of 04 marks each with sub-parts.

Q.Nos	SECTION A	Marks
	Select and write the most appropriate option out of the four options given for each of the questions 1 - 20.	
1.	The gas that is formed mainly when coal is heated : a) Carbon b) Carbon dioxide c) Sulphur d) Nitrogen dioxide	1
2.	In humans, sound is produced by: a) Tongue b) Larynx c) Food pipe d) Pharynx	1
3.	For a given force, what will be the effect on pressure if there is an increase in the area of contact? a) Pressure will decrease b) Pressure will increase c) Pressure will remain same d) Pressure will become zero	1
4.	The heat produced when 5kg of a fuel is completely burnt is 15000kJ. What is the calorific value of the fuel? a) 300kJ b) 3000kJ c) 30kJ d) 3kJ	1
5.	An electroscope is a device which is used to find: i) the charge of an object ii) if an object is charged iii) calorific value of a substance a) (i) and (ii) b) (i) and (iii) c) (ii) and (iii) d) (i), (ii) and (iii)	1
6.	In which of the given order the forces are arranged correctly in the decreasing order? a) Rolling friction<Static friction<Sliding friction b) Static friction<Sliding friction<Rolling friction	1

17.	<p>Assertion: Static friction is smaller than sliding friction.</p> <p>Reason: Static friction exists between a stationary object and the surface on which it is resting.</p>	1
18.	<p>Assertion: Pressure at the bottom of a water tank is more than the pressure at the top of the tank.</p> <p>Reason: Atmospheric pressure is the force acting per unit area, by the atmosphere, on the surface of an object.</p>	1
19.	<p>Assertion: Quality of voice is different in different people.</p> <p>Reason: Vibrations produce sound.</p>	1
20.	<p>Assertion: When electric current passes through an electrolyte, bubbles of gas are formed on the electrodes.</p> <p>Reason: Chemical reactions occur when electric current is passed through a conducting solution.</p>	1
<p>SECTION B</p> <p>Question No. 21 to 26 are very short answer questions.</p>		
21.	<p>State any two features of 'quake-safe' houses in seismic zones.</p> <p style="text-align: center;">OR</p> <p>State any two steps you would take to protect yourself from earthquakes if you are at home.</p>	2
22.	What is refining of petroleum? What is its significance?	2
23.	Give any two examples of situations in which applied force brings about change in direction of a moving object.	2
24.	<p>The sound waves produced by two musical instruments are given below.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>(a)</p> </div> <div style="text-align: center;">  <p>(b)</p> </div> </div> <p>Which of these are sound waves produced by a whistle? Give reason for your answer.</p>	2
25.	<p>Explain how lubricants help in reducing friction.</p> <p style="text-align: center;">OR</p> <p>State any two methods by which we can increase friction.</p>	2
26.	<p>In the given circuit, the bulb was found to glow. Explain why.</p> <div style="text-align: center;">  </div>	2

SECTION C		
Question No. 27 to 33 are short answer questions.		
27.	(a) If the angle between the mirror and the reflected ray is 25° , what is the measure of the angle of incidence? (b) State the laws of reflection.	3
28.	(a) What will you observe if the metallic ball shown in the electroscope is touched with a charged object? (b) On what principle does an electroscope work? (c) Two inflated balloons are rubbed with a woollen cloth and then brought close to each other. Would these balloons attract or repel? Why?	3
		
29.	(a) Differentiate between conductors and insulators. (b) Rain water conducts electricity whereas distilled water does not. Why?	3
30.	(a) The pressure of a gas contained in a cylinder with a movable piston is 300Pa. The area of the piston is 50 m^2 . Calculate the force exerted on the piston. (b) Define pressure.	3
OR		
	(a) Name any two factors on which pressure depends. (b) Differentiate between contact and non-contact forces.	
31.	Give reason: a) The jar of a mixer becomes hot if it is run for a few minutes. b) We can write on paper with pencil but not on glass. c) Sometimes when you wash utensils, they slip from your hand.	3
32.	The image represents the human ear.	3
		
	(a) What is the significance of the part labelled A? (b) Give any two differences between audible and inaudible sounds.	
33.	Observe the diagram of the human eye: (a) Name the parts labelled 1 and 2. (b) What is the function of the part labelled 7? (c) What is blind spot?	3
		

SECTION D																																
Question No. 34 to 36 are long answer questions.																																
34.	(a) How is pitch related to frequency? (b) What is the major difference in the characteristics of feeble and loud sound? (c) Calculate the time period of a pendulum which makes 100 oscillations in 50 secs.	5																														
35.	(a) What is electroplating? (b) In the setup for electroplating copper over an iron rod, which terminal of the battery is connected to the iron rod? (c) Briefly explain how electroplating of copper over iron rod takes place.	5																														
36.	In the picture given, (a) Why does the water fall at different levels? (b) What does this activity demonstrate? (c) How does atmospheric pressure help in the upward movement of juice through a straw? (iv) Name the force that helps water in the river to flow downward. Explain this force.	5																														
																																
SECTION E																																
Question No. 37 to 39 are case-based/data -based questions with 3 short sub-parts. Internal choice is provided in the last sub-part.																																
37.	The picture below shows the different types of extinguishers used for specific fires. <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Class of Fire</th> <th>Type of Fire</th> <th>Type of Extinguisher</th> <th>Extinguisher Identification</th> <th>Symbol</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Ordinary combustibles: wood, paper, rubber, fabrics, and many plastics</td> <td>Water, Dry Powder, Halon</td> <td></td> <td></td> </tr> <tr> <td>B</td> <td>Flammable Liquids and Gases: gasoline, oils, paint, lacquer, and tar</td> <td>Carbon Dioxide, Dry Powder, Halon</td> <td></td> <td></td> </tr> <tr> <td>C</td> <td>Fires involving Live Electrical Equipment</td> <td>Carbon Dioxide, Dry Powder, Halon</td> <td></td> <td></td> </tr> <tr> <td>D</td> <td>Combustible Metals or Combustible Metal Alloys</td> <td>Special Agents</td> <td></td> <td>No Picture Symbol </td> </tr> <tr> <td>K</td> <td>Fires in Cooking Appliances that involve Combustible Cooking Media: Vegetable or Animal Oils and Fats</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Class of Fire	Type of Fire	Type of Extinguisher	Extinguisher Identification	Symbol	A	Ordinary combustibles: wood, paper, rubber, fabrics, and many plastics	Water, Dry Powder, Halon			B	Flammable Liquids and Gases: gasoline, oils, paint, lacquer, and tar	Carbon Dioxide, Dry Powder, Halon			C	Fires involving Live Electrical Equipment	Carbon Dioxide, Dry Powder, Halon			D	Combustible Metals or Combustible Metal Alloys	Special Agents		No Picture Symbol 	K	Fires in Cooking Appliances that involve Combustible Cooking Media: Vegetable or Animal Oils and Fats				4
Class of Fire	Type of Fire	Type of Extinguisher	Extinguisher Identification	Symbol																												
A	Ordinary combustibles: wood, paper, rubber, fabrics, and many plastics	Water, Dry Powder, Halon																														
B	Flammable Liquids and Gases: gasoline, oils, paint, lacquer, and tar	Carbon Dioxide, Dry Powder, Halon																														
C	Fires involving Live Electrical Equipment	Carbon Dioxide, Dry Powder, Halon																														
D	Combustible Metals or Combustible Metal Alloys	Special Agents		No Picture Symbol 																												
K	Fires in Cooking Appliances that involve Combustible Cooking Media: Vegetable or Animal Oils and Fats																															
<p>a) Which pair of extinguishers would you keep in your class to fight fire in case of emergency? Write the extinguisher identification for the pair you choose.</p> <p>b) What are inflammable substances?</p> <p>c) Differentiate between ignition temperature and calorific value of a fuel.</p> <p style="text-align: center;">OR</p>																																

	c) State any four features of a good fuel.		
38.	<p>Lightning can cause damage to structures made of metals and even steel. The huge currents involved can heat these materials. As lightning tends to strike the highest object in the vicinity, rods are typically placed at the apex of a building and along its ridges; they are connected to the ground by metallic cables. This protects the structure from lightning damages.</p> <p>a) What is the significance of the device shown in the picture? b) What is earthing? c) What is the difference between lightning and thunder?</p> <p style="text-align: center;">OR</p> <p>c) Suggest any two precautions to be taken during lightning, if you are indoors.</p>		4
39.	<p>The most comfortable distance at which a person can read with a normal healthy eye is 25cm and the farthest point of good vision is infinity. Foods that are good for keeping the eye healthy include fish, nuts, seeds, leafy greens, yellow and orange fruits which are rich in vitamins and minerals like zinc.</p> <p>a) What is the range of normal vision in humans? b) Give an example of an eye defect caused due to nutritional deficiency. c) Name the vitamin which is considered good for proper eyesight. Give any two sources of this vitamin.</p> <p style="text-align: center;">OR</p> <p>c) Differentiate between rods and cones.</p>		4