

**CLASS: VIII** 

## **INDIAN SCHOOL SOHAR**

## **TERM II EXAMINATION (2023-24)**

## SCIENCE

MAX. MARKS: 80 TIME: 3 HOURS

## DATE: 03/03/2024 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.

SECTION A	Marks						
Select and write the most appropriate option out of the four options given for							
each of the questions 1 - 20.							
The gas that is formed mainly when coal is heated :							
a) Carbon b) Carbon dioxide c) Sulphur d) Nitrogen dioxide							
In humans, sound is produced by:	1						
a) Tongue b) Larynx c) Food pipe d) Pharynx							
For a given force, what will be the effect on pressure if there is an increase in the	1						
area of contact?							
a) Pressure will decrease b) Pressure will increase							
c) Pressure will remain same d) Pressure will become zero							
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							
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)							
In which of the given order the forces are arranged correctly in the decreasing	1						
order?							
a) Rolling friction <static friction<="" friction<sliding="" td=""><td></td></static>							
	Select and write the most appropriate option out of the four options given for each of the questions 1 - 20.The gas that is formed mainly when coal is heated :a) Carbonb) Carbon dioxidec) Sulphurd) Nitrogen dioxidea) Carbonb) Carbon dioxidec) Sulphurd) Nitrogen dioxideIn humans, sound is produced by: a) Tongueb) Larynxc) Food piped) Pharynxa) Tongueb) Larynxc) Food piped) PharynxFor a given force, what will be the effect on pressure if there is an increase in the area of contact?b) Pressure will increasea) Pressure will decreaseb) Pressure will increasec) Pressure will remain samed) Pressure will become zeroThe heat produced when 5kg of a fuel is completely burnt is 15000kJ.What is the calorific value of the fuel?a) 300kJb) 3000kJc) 30kJd) 3kJAn electroscope is a device which is used to find:i) the charge of an objectii) if an object is chargediii) calorific value of a substancea) (i) and (iii)b) (i) and (iii)c) (ii) and (iii)d) (i), (ii) and (iii)In which of the given order the forces are arranged correctly in the decreasing order?						

	c) Rolling friction <sliding friction<="" friction<static="" th=""><th></th></sliding>				
	d) Sliding friction <static friction<="" friction<rolling="" th=""><th></th></static>				
7.	Earthquakes cannot cause:	1			
	a) Tsunami b) Floods c) Landslide d) Lightning				
8.	Petroleum and natural gas are formed in the:	1			
	a) presence of light b) absence of air				
	c) presence of air d) absence of pressure				
9.	Ink pen starts leaking at high altitudes as:	1			
	a) Atmospheric pressure increases with increase in height above sea level.				
	b) Atmospheric pressure decreases with increase in height above sea level.				
	c) Ink solidifies at high altitudes.				
	d) Pressure in the ink pen decreases.				
10.	What would be the angle of reflection, if a ray of light strikes a mirror	1			
	perpendicularly?				
	a) 90° b) 0° c) 45° d)180°				
11.	Iron used in construction of bridges is coated with another metal to protect it	1			
	from rusting. Which among the given elements is the one used for this purpose?				
	a) Steel b) Silver c) Tin d) Zinc				
12.	The defect of the eye where the lens becomes foggy is called:	1			
	a) Long sight b) Cataract c) Presbyopia d) Short sight				
13.	LEDs are preferred over normal bulbs in circuits as:	1			
	a) LEDs are brighter than bulbs.				
	b) LEDs have high voltage.				
	c) LEDs can glow even when weak current flows through the circuit.				
	d) All of the above.				
14.	What is the colour of the region of a candle flame which has the highest	1			
	temperature?				
	a) Red b) Blue c) Yellow d) Black				
15.	Sounds of different frequencies are given as:	1			
	i) 19KHz ii) 30KHz iii)25KHz v) 10KHz, which of these can be heard by				
	humans?				
	a) (i) and (ii) b) (ii) and (iii) c) (iii) and (iv) d) (i) and (iv)				
16.	A solution which conducts electricity is called an:	1			
	a) Electrode b) Electrolyte c) Resistor d) Tester				
	Question 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.				

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

Question No. 27 to 33 are short answer questions. the angle between the mirror and the reflected ray is 25°, what is the easure of the angle of incidence? ate the laws of reflection. hat will you observe if the metallic ball shown in the electroscope is nuched with a charged object? n what principle does an electroscope work? wo inflated balloons are rubbed with a conductor and then brought close to each ther. Would these balloons attract or repel? 'hy? fferentiate between conductors and insulators. ain water conducts electricity whereas distilled water does not. Why? the pressure of a gas contained in a cylinder with a movable piston is 300Pa. the area of the piston is 50 m <sup>2</sup> . Calculate the force exerted on the piston. efine pressure. <b>OR</b>	3 3 3 3
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ame any two factors on which pressure depends.	
fferentiate between contact and non-contact forces.	
reason:	3
e jar of a mixer becomes hot if it is run for a few minutes.	
e can write on paper with pencil but not on glass.	
netimes when you wash utensils, they slip from your hand.	
mage represents the human ear.	3
Auditory Nerve (to the brain) Ear Canal	
nat is the significance of the part labelled A?	
ve any two differences between audible and inaudible sounds.	3
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rve the diagram of the human eye:	
rve the diagram of the human eye:	
	hat is the significance of the part labelled A? ve any two differences between audible and inaudible sounds. rve the diagram of the human eye: ame the parts labelled 1 and 2.

			SECTION D					
	Que	stion No	. 34 to 36 are long	answer q	uestions.			
34.	(a) How is pitch	related	to frequency?					5
	(b) What is the major difference in the characteristics of feeble and loud sound?					sound?		
	(c) Calculate the time period of a pendulum which makes 100 oscillations in 50							
	secs.							
35.	(a) What is elec	troplatir	ıg?					5
(b) In the setup for electroplating copper over an iron rod, which termination						al of the		
	battery is co	onnected	to the iron rod?					
	(c) Briefly explain how electroplating of copper over iron rod takes place.							
36.	In the picture g	iven,						5
	(a) Why does the water fall at different levels?							
	(b) What does	this activ	ity demonstrate?		Water	1		
	(c) How does a	tmosphe	eric pressure help i	n		N		
	the upward	l movem	ent of juice throug	h a strawî		11		
	(iv) Name the f	orce that	helps water in the	e river		17		
	to flow downward. Explain this force.							
	and the second s							
			SECTION E					
	Question No. 37 to 39 are case-based/data -based questions with 3 short sub-							
	parts. Internal	choice is	provided in the las	t sub-part	Ι.			
37.	The picture bel	ow show	s the different typ	es of extir	iguishers u	sed for spe	ecific	4
	fires.	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	A			
		B	Flammable Liquids and Gases: gasoline, oils, paint, lacquer, and tar	Carbon Dioxide, Dry Powder Halon	В			
		C	Fires involving Live Electrical Equipment	Carbon Dioxide, Dry Powder Halon	C			
		D	Combustible Metals or Combustible Metal Alloys	Special Agents	D	No Picture Symbol		
		K	Fires in Cooking Appliances that involve Combustible Cooking Media: Vegetable or Animal Oils and Fats		K	»: ₩		
	a) Which pair of extinguishers would you keep in your class to fight fire in case							
	of emergend	cy? Write	the extinguisher i	dentificati	on for the	pair you cl	hoose.	
	b) What are inflammable substances?							
	c) Differentiate	e betwee	n ignition tempera	ture and	calorific va	lue of a fu	el.	
OR								

	c) State any four features of a good fuel.	
38.	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. 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? OR	4
	c) Suggest any two precautions to be taken during lightning, if you are indoors.	
39.	<ul> <li>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.</li> <li>a) What is the range of normal vision in humans?</li> <li>b) Give an example of an eye defect caused due to nutritional deficiency.</li> <li>c) Name the vitamin which is considered good for proper eyesight. Give any two sources of this vitamin.</li> </ul>	4