



SINDHI HIGH SCHOOL, BENGALURU
ANNUAL EXAMINATION [2022-23]
SUBJECT: SCIENCE

Class: VIII
Date: 30.03.2023
No. of Sides: 07

Max Marks: 80
Reading Time: 8:00 to 8:15 am
Writing Time: 8:15 to 11:15 am

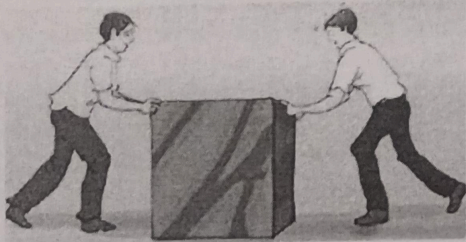
General Instructions:

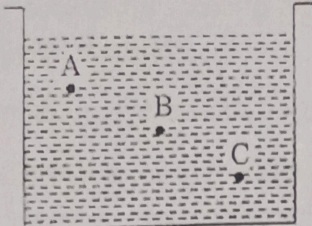
1. The Question Paper contains five sections and 39 questions.
2. All questions are compulsory.
3. **Section A** has of 20 objective type questions of 1 mark each.
Section B has 6 very short questions carrying 2 marks each.
Section C consists of 7 short answer type questions carrying 3 marks each.
Section D has 3 long answer type questions carrying 5 marks each.
Section E has 3 case study units of assessment of 4 marks each.
4. Internal choices is provided in some questions; A student has to attempt only one of the alternative questions should be attempted.

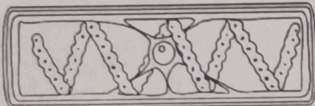


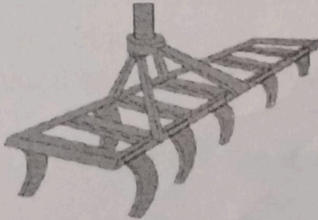
SECTION - A

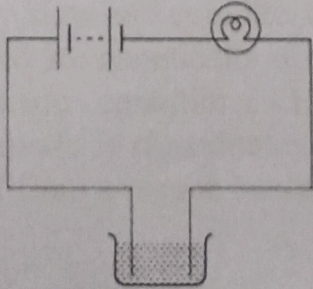
Q. no 1 to 20 are objective type questions

1.	The formula of Ammonium Sulphate is: (a) NH_4SO_4 (b) NH_4SO_3 (c) $(\text{NH}_4)_2\text{SO}_4$ (d) $(\text{NH}_4)_3(\text{SO}_4)_2$
2.	The element Z burns in air to form an oxide. The aqueous solution of this oxide turns blue litmus to red. This element is likely to be: (a) carbon (b) calcium (c) iron (d) magnesium
3.	You are given a solution of iron sulphate. Which of the following do you think cannot displace iron from iron sulphate ? (a) magnesium (b) calcium (c) copper (d) zinc
4.	Fires in underground coal mines usually occur due to the : (a) explosive combustion (b) spontaneous combustion (c) deliberate combustion (d) rapid combustion
5.	Which of the following is the most environment friendly fuel to be used in automobiles? (a) petrol (b) diesel (c) petroleum gas (d) natural gas

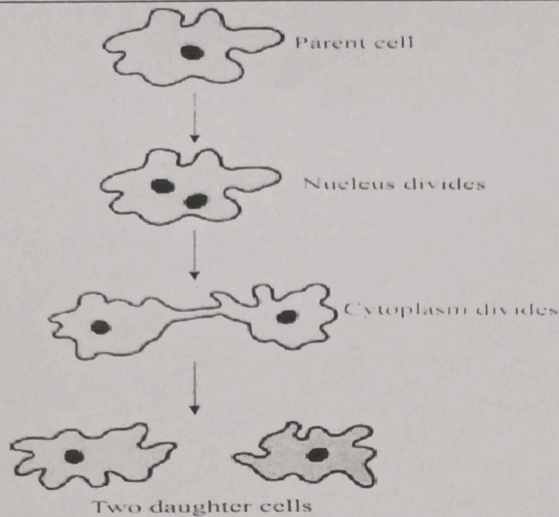
6.	Which one among the following are thermosetting polymers? A. Melamine B. Terylene C. Polythene D. Bakelite a) A and B b) B and C c) A and D d) B and D
7.	Which is not a property of plastic? a) biodegradable b) light c) strong d) durable
8.	The plastic which is coated on the uniforms of fireman to make them fire -resistant is: (a) Bakelite (b) polythene (c) Teflon (d) melamine
9.	The sex chromosomes present in human females are: a) XX b) YY c) XY d) XYY
10.	The process of beating out grains from the harvested wheat crop is called: a) beating b) threshing c) crushing d) weeding
11.	Which of the following is not a communicable disease? a) cholera b) cancer c) chickenpox d) malaria
12.	A human cell which can change its shape is: a) red blood cells b) Plastids c) White blood cells d) Nerve cells
13.	The image formed by a plane mirror is: (a) virtual, behind the mirror and enlarged. (b) real, at the surface of the mirror and enlarged. (c) real, behind the mirror and of the same size as the object. (d) virtual, behind the mirror and of the same size as the object.
14.	In figure, two boys A and B are shown applying force on a block. If the block moves towards boy A, which one of the following statements is correct?  A. B. (a) Magnitude of force applied by A is smaller than that of B. (b) Magnitude of force applied by A is greater than that of B. (c) Net force on the block is towards A. (d) Magnitude of force applied by A is equal to that of B.

15.	<p>A container is filled with water as shown in the given figure. Which of the following statements is correct about the pressures at points A, B and C?</p>  <p>(a) Pressure at A > Pressure at B > Pressure at C (b) Pressure at A = Pressure at B = Pressure at C (c) Pressure at A < Pressure at B < Pressure at C (d) Pressure at A < Pressure at B > Pressure at C</p>
16.	<p>The loudness of a sound is determined by:</p> <p>(a) Amplitude (b) Wavelength (c) Time period (d) Frequency</p>
<p>Q. no 17 to 20 are Assertion – Reasoning based questions. In the following question, a statement of Assertion is followed by a statement of Reasoning. Choose the correct answer from the following options.</p> <p>a) Both A and R are true & R is the correct explanation of A. b) Both A and R are true but R is not the correct explanation of A. c) A true but R is false. d) A is false but R is true.</p>	
17.	<p>Assertion (A): The lens focuses light on the back of the eye, on a layer called retina. Reason (R): Kaleidoscope works due to dispersion of light.</p>
18.	<p>Assertion (A): The sound produced by the flute is more shrill than the sound produced by a tabala. Reason (R): Frequency produced by the flute will be greater than the frequency produced by the tabala.</p>
19.	<p>Assertion(A): Handles of utensils are made up of thermoplastic. Reason (R): Thermoplastics get soften on heating.</p>
20.	<p>Assertion (A): The abundant eggs laid by the frog hatch into small fish like larvae called tadpoles. Reason (R): The transformation of the larvae into the adult through drastic changes is called Fertilization.</p>
<p>SECTION-B Q. no 21 to 26 are very short answer questions</p>	
21.	<p>a) Complete the following chemical reactions.</p> <p style="text-align: center;">Sulphur dioxide (SO₂) + Water (H₂O) \longrightarrow _____</p> <p>b) Name the product and its nature.</p> <p style="text-align: center;">OR</p>

	<p>Give reasons:</p> <p>a) Copper cannot displace zinc from zinc sulphate solution.</p> <p>b) Graphite is used for making electrode in a cell.</p>
22.	<p>Name the hormone that:</p> <p>a) controls metamorphosis in frogs.</p> <p>b) produced by ovaries that helps in development of mammary gland.</p>
23.	How do you control the weeds? (any 2 points)
24.	<p>Identify the micro-organisms given below and mention the type of micro-organism.</p> <p>a) </p> <p>b) </p>
25.	<p>Why does the liquid rise in a syringe when its piston is pulled up?</p> <p style="text-align: center;">OR</p> <p>Name the forces acting on a plastic bucket containing water held above ground level in your hand. Explain why the forces acting on the bucket do not bring a change in its state of motion.</p>
26.	<p></p> <p style="text-align: center;">A</p> <p></p> <p style="text-align: center;">B</p> <p>Identify the tools 'A' and 'B' and write one use of each.</p>
<p>SECTION-C</p> <p>Q. no 27 to 33 are short answer questions</p>	
27.	<p>a) Draw a labelled diagram of candle flame.</p> <p>b) What does a fire brigade do when it arrives at a place where a building is on fire?</p>
28.	<p>a) Balance the following Equations:</p> <p>i) $\text{Fe} + \text{Cl}_2 \rightarrow \text{FeCl}_3$</p> <p>ii) $\text{ZnS} + \text{O}_2 \rightarrow \text{ZnO} + \text{SO}_2$</p> <p>b) Derive the molecular formula of the following compound using steps:</p> <p>i) Calcium carbonate</p>

29.	<p>Mention any 3 ways in which AIDS virus (HIV) can be transmitted.</p> <p style="text-align: center;">OR</p> <p>a) Differentiate between menarche and menopause. b) Mention any two features each that are seen in boys and girls to distinguish them from each other at puberty.</p>
30.	<p>a) Name the type of forces involved in the following: i) A horse pulling a cart. ii) A sticker attached to steel almirah without glue. b) Give Reasons: i) A sharp knife cut objects more effectively than a blunt knife. ii) A fountain of water is created at the holes of pipes of the main water supply line.</p>
31.	<p>Give any 3 examples each to show that friction is both a friend and a foe.</p>
32.	<p>a) Explain why, it is easier to drag a mat on floor when nobody is sitting on it but much more difficult to drag the same mat when a person is sitting on it.</p> <p style="text-align: center;">OR</p> <p>Explain any 3 ways to reduce friction.</p>
33.	<p>Draw a neat, labelled diagram of nitrogen cycle in nature.</p>
<p>SECTION-D Q. no 34 to 36 are long answer questions</p>	
34.	<p>a) What is electroplating? b) For electroplating copper on an iron object, which terminal of the battery (positive or negative) is connected to the iron object? c) Which properties of chromium metal make it suitable for electroplating? d) Give Reasons: i) Before the firemen use the water hoses, they shut off the main electrical supply for the area. ii) Tin is electroplated on iron for making food cans.</p> <p style="text-align: center;">OR</p> <p>a) What is meant by chemical effect of electric current? b) What are the effects observed when an electric current flows through a conducting solution? c) The bulb does not glow in the setup shown below. List the possible reasons.</p> <div style="text-align: center;">  </div>

35.	<p>a) Draw a neat labelled diagram of human cheek cells. b) Differentiate between eukaryotes and prokaryotes with examples for each.</p> <p style="text-align: center;">OR</p> <p>a) Draw a labelled diagram of onion peel cell. b) Mention the functions of the following: i) Cell wall ii) Nerve cells iii) Chromosomes</p>
36.	<p>a) Differentiate between regular and diffused reflection along with labelled diagrams. Does diffused reflection mean the failure of the laws of reflection? b) What are the functions of the following parts of the eye? i) Eye-lens ii) Optic nerve</p>
<p>SECTION-E Q. no 37 to 39 are very short answer questions</p>	
37.	<p>In the light of the availability of various resources in nature, natural resources can be broadly classified into two kinds- Inexhaustible and Exhaustible resources. Inexhaustible natural resources are present in unlimited quantities in nature and are not likely to be exhausted by human activities. Examples are sunlight, and air. Exhaustible resources are present in limited quantities in nature. They can be exhausted by human activities. Examples of these resources are forests, wildlife, minerals, coal, petroleum, natural gas etc. some exhaustible natural resources like coal, petroleum and natural gas. These were formed from the dead remains of living organisms (fossils). So, these are all known as fossil fuels.</p> <p>1) Name any 2 products of coal and their uses. 2) Why is petroleum also known as 'black gold'? 3) Write the full form of CNG and LPG.</p> <p style="text-align: center;">OR</p> <p>Mention any two ways to save petrol/diesel while driving.</p>
38.	<p>Reproduction creates new life and is essential for the existence and continuity of life. Reproduction is important as all organisms have a limited life span; they die of old age, diseases, or accidents. The two different types of reproduction are asexual and sexual reproduction. In sexual reproduction, male and female gametes are formed to produce an offspring. These gametes are either formed by the same individual or by different individuals of the opposite sex. This process is usually slow and complex compared to asexual reproduction. The organisms so produced are genetically diverse. Thus, they can evolve along with the changing climatic conditions. Humans and many multicellular organisms exhibit sexual mode of reproduction.</p> <p>1) How is sheep different from a pigeon based on reproduction? 2) What is a foetus? 3) Name the organism and the type of reproduction seen in this organism</p>



4) Name any two parts of the human male reproductive system.

OR

Name any two parts of the human female reproductive system.

39.

Sound is a type of energy made by *vibrations*. When an object vibrates, it causes movement in surrounding air molecules. These molecules bump into the molecules close to them, causing them to vibrate as well. This makes them bump into more nearby air molecules. This “chain reaction” movement, called *sound waves*, keeps going until the molecules run out of energy. As a result, there is a series of molecular collisions as the sound wave passes through the air, but the air molecules themselves do not travel with the wave. As it is disturbed, each molecule just moves away from a resting point but then eventually returns to it.

- 1) What is the audible range of frequencies for human ears?
- 2) Name our body parts that vibrate when we speak and hear.
- 3) An explosion occurs while on the moon.
Will it be a) seen b) heard.
- 4) Who produces sound of higher pitch: a man or a woman? Why?

OR

What is noise pollution?
