


CLASS – VII
MID TERM EXAMINATION (2023-24)
SUBJECT: SCIENCE
SET C2

Time Allowed: 2 ½ hours**Max Marks: 60****Instructions:**

- This paper comprises of 14 questions.
- **Section A** – Q. No. 1 to 5 – all parts of these questions carry 1 mark each.
- **Section B** – Q. No. 6 to 9 carry 2 marks each.
- **Section C** – Q. No. 10 to 12 carry 3 marks each.
- **Section D** – Q. No. 13 to 14 carry 5 marks (with one choice) each.
- Draw neat and labelled diagram wherever required (with pencil).
- Attempt all questions in order.

SECTION A (1 MARK)

Q1	<p>In the question given below, two statements are given; one is labelled as Assertion (A) and the other is labelled as Reason (R).</p> <p>ASSERTION (A): An iron ball at 70°C is dropped in a mug containing water at 40°C. The heat flows from the iron ball to the water.</p> <p>REASON (R): Heat always flows from a body at a high temperature to a body at a low temperature.</p> <p>Read the statements carefully and choose the correct answer of the question.</p> <p>a) Both A and R are true and 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 is true but R is false. d) A is false but R is true.</p>	1
Q2	<p>Answer in one word:</p> <p>a) Degree of hotness of the body. b) The complex carbohydrate digested by ruminants. c) The reaction between an acid and a base in which salt and water are produced with the evolution of heat. d) A plant that is partially autotrophic. e) A large muscular sheet which forms the floor of chest cavity. f) Combination of two or more cells in a circuit.</p>	(1×6= 6)

	<p>e) During exhalation, the ribs</p> <p>i) Move outwards ii) Move downwards</p> <p>iii) Move upwards iv) Do not move at all</p> <p>f) An electric fuse works on the:</p> <p>i) Chemical effect of current ii) Lightning effect of current</p> <p>iii) Magnetic effect of current iv) Heating effect of current</p>	
SECTION B (2 MARKS)		
Q6	<p>Following picture shows four cells fixed on a board. Draw lines to indicate how you will connect their terminals with wires to make a battery of four cells. Draw the diagram on your answer sheet.</p> 	2
Q7	<p>Explain why:</p> <p>a) Factory waste is neutralized before disposing it into the water bodies.</p> <p>b) The turmeric stain on a white shirt turns red on washing with soap solution.</p>	2
Q8	<p>Write the end products of digestion of the following food components.</p> <p>a) Carbohydrates</p> <p>b) Proteins</p>	2
Q9	Give the composition of oxygen and carbon dioxide in inhaled and exhaled air.	2
SECTION C (3 MARKS)		
Q10	<p>a) What colour will be obtained if a few drops of China rose solution are added to</p> <p>i) Lemon juice ii) Soda water</p> <p>b) Why is calamine applied on the skin when an ant bites?</p>	3
Q11	<p>a) After heavy exercise, we sometimes get cramps in our muscles. Name the substance which gets formed in our muscles.</p> <p>b) Suggest any two ways to get relief from cramps.</p> <p>c) Write the word equation of chemical reaction of Aerobic respiration in our body.</p>	3
Q12	<p>Read the given passage and answer Q12 (a) to Q12 (c), based on the passage and related studied concepts:</p> <p>Heat flow takes place from one body to the other having different temperatures. Light a candle. Keep one hand above the candle flame and one hand on the side of the flame as shown in the diagram below.</p>	3

HAND 'B' (ABOVE THE FLAME) 5 CM AWAY



HAND 'A' (AT SIDE) 5 CM AWAY

- Which hand feels hot and why?
- Name the mode of transfer of heat in case of hand A.
- How does the heat travel in liquids?

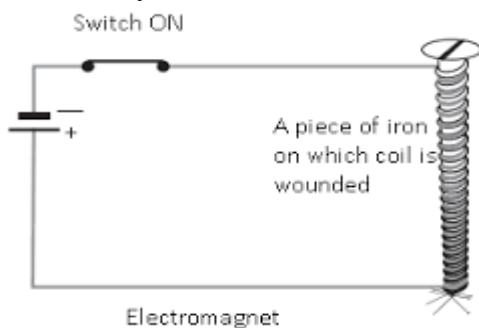
SECTION D (5 MARKS)

- Q13** a) Zubeda made an electric circuit using a battery of two cells, a switch, connecting wires and a bulb. When she put the switch in the 'ON' position, the bulb did not glow. Help Zubeda in identifying any three possible defects in the circuit. **5**

- State any two factors on which the amount of heat produced in a wire depends.

OR

- The device shown in the figure below is an electromagnet. Name the property on which this device is based. Mention any two uses of this device in our daily life.



- Boojho made an electromagnet by winding 50 turns of wire over an iron screw. Paheli also made an electromagnet by winding 100 turns over a similar iron screw. Which electromagnet will attract more pins? Give reasons.

<p>Q14</p>	<p>a) Identify the organ of the digestive system and explain its structure.</p> <div data-bbox="667 233 805 407" data-label="Image"> </div> <p>b) Name three secretions of the inner lining/wall of the organ shown above and write the function of each.</p> <p style="text-align: center;">OR</p> <p>a) Identify the organ of the digestive system and describe its structure.</p> <div data-bbox="704 604 842 772" data-label="Image"> </div> <p>b) Name the finger-like outgrowths present in the inner walls of this organ. Give their function.</p> <p>c) This organ receives secretions from the _____ and the _____.</p>	<p>5</p>
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