



GRADE: X Date:08/11/2024	Monthly Test 3 (2024-25) SCIENCE	Marks: 20 Time: 50 mins
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General Instructions:

1. There are 9 questions in the question paper.
2. All questions are compulsory.
3. Draw diagrams, wherever necessary.

Q.No.	Questions	Mark
SECTION A		
1	The electrical resistivity of a given metallic wire depends upon (a) Its length (b) Its thickness (c) Nature of the material (d) Its length, thickness and nature of the material	1
2	The number of pairs of sex chromosomes in the zygote of a human being is (a) 2 (b) 3 (c) 1 (d) 4	1
3	Two pink coloured flowers on crossing resulted in 1 red, 2 pink and 1 white flower progeny. The nature of the cross will be (a) double fertilisation (b) self pollination (c) cross-fertilisation (d) no fertilisation	1

SECTION B		
4	State Joules law of heating and write its mathematical expression.	2
5	What is a homologous series? Write an example.	2
6	a. Write any 2 properties of carbon by which it forms large number of compounds. b. Explain roasting and calcination .	2
SECTION C		
7	Draw a schematic diagram of a circuit consisting of a battery of five 2 V cells, a 5 ohm resistor, a 10 ohm resistor and a 15 ohm resistor, an ammeter and a plug key, all connected in series. Find (i) the total resistance in the circuit. (ii) the electric current passing through the circuit.	3
8	Explain the refining of copper using electrolytic method with the help of a diagram.	3
SECTION D		
9	a) Why is variation beneficial to the species but not necessarily for the individual? b) How does reproduction help in providing stability to populations of species? c) How are the modes for reproduction different in unicellular and multicellular organisms ?	5

CLASS X SCIENCE

MONTHLY TEST 3

	CHAPTER	1 MARK No. of Ques.	2 MARKS No. of Ques.	3 MARKS No. of Ques.	5 MARKS No. of Ques.	TOTAL MARKS
1	Electricity	1 X 1=1	1 X 2 = 2	1 X 3 =3		6

2	METALS AND NON METALS CARBON CHEMISTRY		2X2=4	1 x 3 = 3		7
	LIFE PROCESSES	2X1=2			1X5=5	7
	TOTAL QUESTIONS	4Q X 1 M = 3 M	1 Q X 2M = 6M	3 Q X 3 M = 6M	1Q X 5M = 5 M	9Q/ 20 M