



Date: 06/11/2023
GRADE: X

MONTHLY TEST -3 (2023-24)
SCIENCE (086)

Max marks: 20
Time: 50 min

General Instructions:

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

Qn. No		Marks allocated
SECTION A		
1	Ethane with molecular formula C_2H_6 has : a)6 covalent bonds b)7 covalent bonds c)8 covalent bonds d)9 covalent bonds	1
2	Electrical resistivity of a given metallic wire depends upon (a) Its length (b) Its thickness (c) Its shape (d) Nature of the material	1
3	Which part of the DNA provides information for a protein? a. Chromosome b. Mitochondria c. RNA d. Gene	1
4	Following question consist of two statements – Assertion (A) and Reason (R). Select 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 but R is not the correct explanation of A. (c) A is true but R is false.	1

	(d) A is false but R is true. Assertion: If mother has two dominant alleles for black hair and father has two recessive alleles for blonde hair then their child will inherit one dominant allele from mother and one recessive allele from father and will have black hair. Reason: Progeny inherits one gene for each trait from its parents but the trait shown by progeny depends on inherited alleles	
SECTION B		
5	a) Distinguish between roasting and calcination with example. b) Write a chemical reaction to illustrate the use of aluminium for joining cracked railway lines.	1+1
SECTION C		
6	(i) Draw a circuit diagram for a circuit consisting of a battery of five cells of 2 volts each, a 5 Ω resistor, a 10 Ω resistor and a 15 Ω resistor, an ammeter and a plug key, all connected in series. Also connect a voltmeter to record the potential difference across the 15 Ω resistor. and calculate (ii) the equivalent resistance (iii) the electric current passing through the above circuit.	3
7	State a) Right hand thumb rule b) Fleming's left hand rule	1+2
8	a) Draw the electron structure of ethene. b) What is meant by hydrogenation? Write equation.	2+1
SECTION D		
9	A) Write the functions of each of the following parts in a human female reproductive system: I. Ovary II. Uterus III. Fallopian tube B) Write the structure and functions of placenta in a human female.	(3+2=5)
THE END		