

National Education Society's High School
Bhandup (w) Mumbai – 400 078

Std: X₂ Div:

Monthly Test

Marks:40

Roll No:

Sub-Science (A)

Time:2 Hrs.

Date:11.2.2019

No of Pgs-05

Q I Solve the following questions:

(1)

1) Reflection of light: Mirror: _____: Prism

2) Find the odd one out : Calcium oxide, Sodium oxide, (1)
Lithium oxide, aluminum oxide

3) State True or False, If wrong write the correct answer: (1)

Absence of conical cells results in colour blindness.

4) Redox Reaction = Reduction + _____ (1)

5) Match the pair: (1)

1) IRNSS	a) Telecommunication
2) INSAT	b) Education
	c) Locating place with precision

IB) Choose the correct alternative and rewrite the sentence:

(5)

1) If pressure is applied on ice, its melting point _____

a) increases b) decreases c) remains the same d) fluctuates

2) Value of gravitational constant G

On the moon will be _____

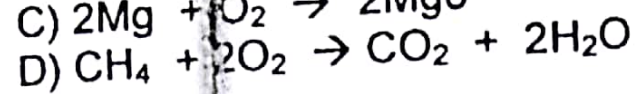
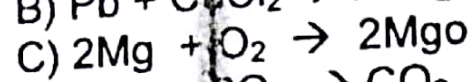
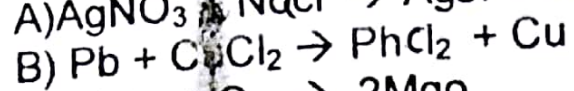
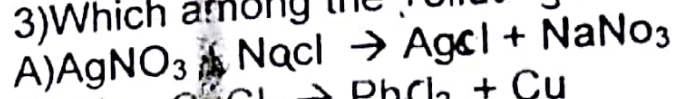
A) 1/6 value of G on the earth.

B) 6 times value of G on the earth

C) same as that of value of G on the earth.

D) true value of G on the earth.

3) Which among the following is double displacement reaction ?



4) The main constituents of cooking gas are _____

A) propane & butane B) butane & benzene

C) propane & benzene D) methane & acetylene

5) While finding the focal length of convex lens, the image obtained is _____

a) real & erect b) real & inverted

c) virtual & erect d) virtual & inverted.

Q II Solve the following questions:-

(10)

(Any 5)

1) Write a note on leaching.

2) Use the term Saturated / Unsaturated to complete the following table:

Sr. No	Molecular formula	Saturated/ Unsaturated
i)	C_3H_6	_____
ii)	C_8H_{14}	_____
iii)	C_5H_{12}	_____
iv)	C_7H_{14}	_____

3) How much heat energy is necessary to raise the temperature of 5Kg of water from 20°C to 100°C ?

4) In the electric equipment producing heat eg iron , electric heater, boiler, toaster etc an alloy such as nichrome is use, not pure metals -Give reason.

- 5) If sodium chloride is added to silver nitrate solution
a) which precipitate is formed? Name the type of reaction
b) Write the chemical equation

6) Distinguish between : Mass and Weight of an object.

7) Explain why the metallic character goes on decreasing while going from left to right in a period.

Q II) Answer the following questions (Any 5) (15)

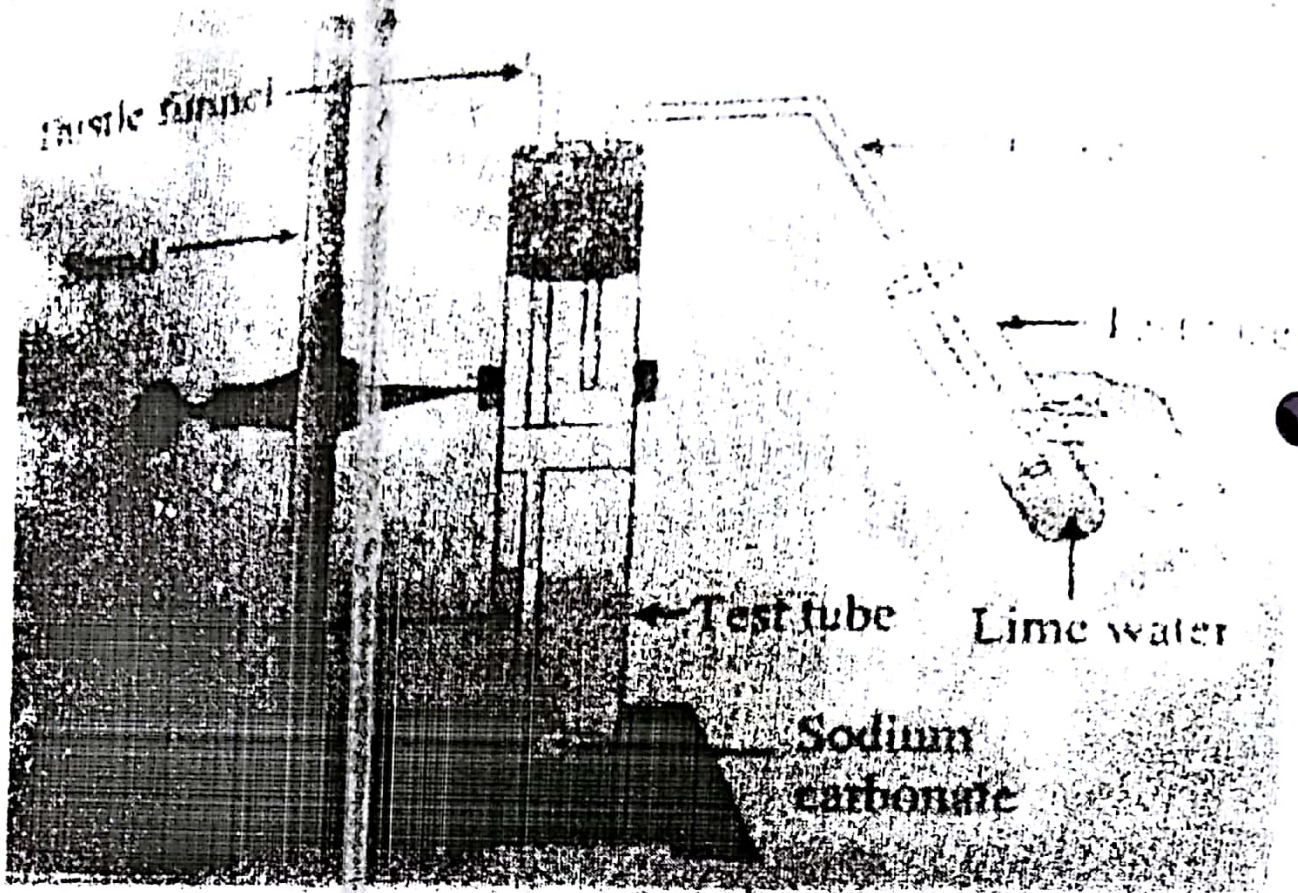
1) Prove that a rainbow is the combined effect of ^{refraction} refraction, dispersion and total internal reflection.

2) Complete the paragraph using the appropriate options given below:

(motor, parallel, electric current, force, moves, conductor, melts, changing, perpendicular, constant)

When an electric _____ is kept in a magnetic field such that direction of current flowing through the conductor is _____ to the magnetic field, then a _____ exerted on the conductor. As a result the conductor _____. But if an electric conductor is missing in a magnetic field or the magnetic field is _____, then _____ can be produced with the help of a moving magnet.

3) The foll. diagram is the experimental setup for the reaction between ethanoic acid & sodium carbonate.



- Which gas is evolved in the above experiment?
- What happens when the evolved gas reacts with lime water?
- Write balanced chemical equation for the reaction of ethanoic acid with sodium carbonate.
- Complete the table

Terms	Units of measurement
1) Universal gravitational constant	
2) Acceleration due to gravity	
3) _____	
4) Weight	Kg
5) _____	sec
6) _____	m/sec

5) Draw a neat labelled diagram of Hope's apparatus. Define latent heat of fusion.

6) The electronic configuration of metal 'A' is (2,8,7) metal B is (2,4) and metal C is (2,8,2)
valency Identify elements A, B & C
Find out Valence of A, B, & C
Among A & C which element is more electropositive? Why?

7) Explain the term with example:
Hetero atom in a carbon compound.

QIV Answer the following questions (Any one) (5)

1) What is meant by satellite launch vehicle? Explain a SLV developed by ISRO with the help of a schematic diagram

2) Explain the electrolytic reduction of alumina with the help of a neat labeled diagram