PRISM WORLD

Std.: 9 (English) **Science 1** **Marks: 40**

Date: **Time: 2 hrs**

Chapter: 1 to 5

Q.1 (A) Write the correct alternative : **(5)**

1) To glow a bulb, the electrical current.

a. should be open b. should be semi closed

c. should be closed d. None of the above

2) A car is moving with a velocity of 50km/hr for 5 hours, is an example of .....

a. zero acceleration b. positive acceleration

c. negative acceleration d. retardation

3) Ammonia in aqueous solution, gives ..... ions as basic radical.

a. NH_4^+ b. $2OH^-$ c. NH_3^+ d. $H_2O^-_3$

4) Give an example for transformation of electrical energy into chemical energy.

a. Secondary Cell b. Electric lamp

c. Primary Cell d. Engine

5) Name a polyatomic element -

a. Helium b. Neon c. Ozone d. Argon

Answer the following : **(5)**

1) Find the odd one out

Nacl, $CaCl_2$, KBr, LiCl.

2) Complete the correlation :

Nitrogen : N :: ..... : Ne

3) State True or False

The bond formed in NaCl is an ionic bond where Na forms anion and Cl forms cation.

4) Match the Columns :

Column "A"	Column "B"
i. Newton's first law of motion	a. Motion of rocket
ii. Newton's second law of motion	b. Only the carom coin at the bottom of a pile moves on been hit by the striker

iii. Newton's third law of motion	c. In a high jump athletic event, the athletes are made to fall on a sand bed

5) Name the following

Bivalent acidic radicals.

Q.2 Give scientific reasons (any two) **(4)**

1) It is easier to stop a tennis ball as compared to a cricket ball, when both are travelling with the same velocity.

2) A small amount of electrolyte is added during electrolysis of water.

3) While driving a nail into wood, the hammer is taken backward.

(B) Answer the following (any three) : **(6)**

1) If in carrying a electric charge of 8 coulombs between two points in a circuit, 12 joule of work is done, find the P.D between the two points.

2) Give the reactions for following

Ammonia dissolved in water is directly added to nitric acid solution.

3) Explain the term 'radicals'.

4) Write a short note

Valency

5) Distinguish between:

Voltmeter and Ammeter

Q.3 Answer the following questions. (Any five) **(15)**

1) What happens to speed, velocity and acceleration when an object moves in a circle with uniform speed?

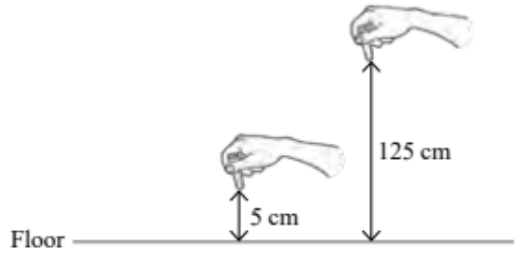
2) a. How many molecules of water are there in 36 g of water?
b. How many molecules of H_2SO_4 are there in 49 g of the sample?

3) What is unified mass. Write another name of united mass, Its symbol and value in kilogram.

4) Magnesium and sodium atoms have same outer most orbit but magnesium atom is smaller than sodium atom. Explain

5) What is speed? State its units and types.

6) The following figures show two chalks being dropped from two different heights.



Answer the following questions.

a. Is there a difference in the results of the two activities?

b. If so, why?

c. What is the expression for potential energy?

7) Explain why copper is used on a large scale for making electric wires?

8) Complete the following table

Sl No	Acid	Number of H^+ ions obtained from one molecule
1	HCl	
2	HNO_3	
3	H_2SO_4	
4	H_2CO_3	
5	H_3BO_3	
6	H_3PO_4	

Q.4 Answer the following questions. (Any one) **(5)**

1) M is a bivalent metal. Write down the steps to find the chemical formulae of its compound formed with the radical Sulphate and Phosphate.

2) Take 5 examples from your surroundings and give explanation based on Newtons laws of motion.