



DELHI PUBLIC SCHOOL BANGALORE - EAST

Internal Assessment Exam

Chemistry

Grade-IX

Total Marks : 20

Answer the Q1 selecting 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 and R is not the correct explanation of A**
- C. A is true but R is false**
- D. A is False but R is true**

1. Assertion (A): 1amu represents $1/12^{\text{th}}$ the mass of one atom of C-12. (1)

Reason(R): amu is nowadays written as 'u' (unified mass)

2. How are 2N and N₂ different from each other? (1)

3. Define atomicity. What is the atomicity of ozone and argon? (2)

4. Calculate the ratio by mass of constituting elements in (2)

a) Magnesium sulphide

b) Calcium oxide.

5. Write down the chemical formulae of the following: (3)

a) Ammonium carbonate

b) Calcium chloride

c) Zinc phosphate

d) Magnesium hydroxide

e) Silver(I) sulphate

f) Copper(II) nitrate

6. a) A cation X is divalent and anion Y is tetravalent. Write down the formula of compound formed by these two ions. (1)

b) Magnesium and oxygen combine in the ratio of 3:2 by mass to form magnesium oxide. How much oxygen is required to react completely with 12g of magnesium? Which law of chemical combination will govern your answer? (2)

7. a) 2.8g of nitrogen gas was allowed to react with 0.6g of hydrogen gas to produce 3.4g of ammonia. Show that these observations are in agreement with the law of conservation of mass. (1)

b) Write the formulae of cations and anions present in the following compounds (2)

i) Ammonium nitrate

ii) Aluminium oxide

8. a) An element 'Z' forms the following compound when it reacts with hydrogen and oxygen. (2)

ZH_3 , Z_2O_3

i) What is the valency of element 'Z'?

ii) What will be the formula of compound formed when 'Z' reacts with chlorine?

b) Write down the names of following compounds. Identify the elements present in them. (3)

i) Ag_2CO_3

ii) $Al(OH)_3$

