Test Jot Series Class: 9th **Student Name: Test Series** Subject: Paper Type: **Chemistry (SNC) Paper Time:** 45 **Maximum Marks:** Q1. Choose the correct option. (6X1=6)1. Which compound has same molecular and empirical formula? **(A)** H_2O_2 (**B**) C₆H₆ (C) C₆H₁₂O₆ **(D)** H₂O 2. Formula of Magnesium nitride: (B) Mg₂N_z (C) MgN₂ (**D)** Mg₂N₂ 3. What is the chemical formula for carbon dioxide? (A) CO (B) CO₂ (C) C₂O (D) C₂O₂ 4. What is the chemical formula for calcium carbonate? (A) CaCO₂ (B) CaCO₃ (C) Ca₂CO₃ (**D**) Ca₃CO₂ 5. What is the term for the substances formed in a chemical reaction? (A) Reactants (B) Catalysts (C) Products (D) Intermediates 6. 40 g of H₃PO₄ contains number of moles?

(C) 0.408g

Q2. Write down short answers of following questions.

(B) 4.8q

(7X2=14)

[i] What is the relationship between molecular and

[ii] What is the molecular formula of acetic acid?

empirical formula?

(A) 0.58g

[iii] Calculate the molar mass of MgCO₃?

[iv] How can you calculate the masses of the products

[v] Difference between reactants and products?

formed in a reversible reaction? (Constructed Response [vi] What is the number of moles of O2 required to burn 2

(D) 5.8g

Question)

moles of methane. $CH_4+2O_2\rightarrow CO_2+2H_2O$?

[vii] What is balanced chemical equation?

Write detailed answers of the following questions.(Answer any 2)

(2X5=10)

- 1. A compound has the following formula CH₃-CH₂-CH₂-COOH. determine the empirical formula?
- 2. When 8.657g of a compound were converted into elements, it gave. 5.217g of carbon 0.962g of hydrogen and

2.478g of oxygen. Calculate the percentage of each element present in this compound. (Constructed Response

Questions)

3. Explain the concepts of Avogadro's number and mole.