

Step Academy official

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STUDENT NAME	
PAPER CODE	67261
TIME ALLOWED	40
Paper Date	20-02-2026



CLASS	New 1st Year (FSC/ICS)
SUBJECT	Chemistry
TOTAL MARKS	25
Paper Type	

Q1. Choose the correct answer.

5X1=5

1. Arrhenius equation can be used to determine:

- (A) Ionization energy (B) Potential energy (C) Internal energy (D) Activation energy

2. Marble is most reactive with H_2SO_4 in:

- (A) Large chunk (B) Bricks form (C) Grannular form (D) Powder form

3. The reaction having rate equation, $\text{Rate} = K [\text{H}_2][\text{NO}]^2$ if Hydrogen is present in large excess, the order of reaction is:

- (A) 1st order (B) 2nd order (C) 3rd order (D) Pseudo first order

4. Photochemical reactions usually have order:

- (A) 1st (B) 2nd (C) 3rd (D) Zero

5. The units of rate of reaction are:

- (A) $\text{Moles dm}^{-3} \text{ sec}^{-1}$ (B) $\text{Mole}^{-1} \text{ dm}^3 \text{ sec}^{-1}$ (C) $\text{Moles dm}^{-3} \text{ sec}$ (D) $\text{Mole}^{-1} \text{ dm}^3 \text{ sec}$

Q2. Write short answers of the following questions.

10X2=20

1 . What is energy of activation?

2 . What is meant by elastic collision?

3 . Rate of reaction changes with time. Why?

4 . Describe how surface area affects rate of reaction?

5 . How Nature of Reactants effect the rate of reaction?

6 . How does the increase of temperature increases the rate of the chemical reactions?

7 . Differentiate catalysis and heterogeneous catalysis.

8 . What is meant by order of reaction?

9 . Explain zero order reaction?

10 . What are pseudo first order reaction?