

<b>CHEMISTRY-11</b>	<b>Chapter#11(Complete) Test-5</b>		
	Name:	Class:	ID:
Date: / /	<b>Marks Total: 40</b>	<b>Marks Obtained:</b>	
Time Allowed: 75 Min.			

Maximum Marks: 08

**(OBJECTIVE TYPE)**

Time Allowed: 10 Min.

**NOTE:** Tick The Correct Option:

- The rate of reaction:**
  - Increases as the reaction proceeds.
  - Decreases as the reaction proceeds.
  - Remains the same as the reaction proceeds.
  - May decrease or increase as the reaction proceeds.
- The rate of reaction determined at any given time is called:**
  - Average rate
  - Instantaneous rate
  - Spontaneous rate
  - Overall rate
- The units of rate constant for second order reaction are:**
  - Moles  $\text{dm}^{-3}\text{s}^{-1}$
  - Moles<sup>-1</sup> $\text{dm}^3\text{s}^{-1}$
  - Moles<sup>-2</sup> $\text{dm}^6\text{s}^{-1}$
  - $\text{s}^{-1}$
- Which reaction has fractional order?**
  - $2\text{NO} + 2\text{H}_2\text{O} \rightarrow 2\text{H}_2\text{O} + \text{N}_2$
  - $\text{NO} + \text{O}_3 \rightarrow \text{NO}_2 + \text{O}_2$
  - $2\text{HI} \rightarrow \text{H}_2 + \text{I}_2$
  - $\text{CHCl}_3 + \text{Cl}_2 \rightarrow \text{CCl}_4 + \text{HCl}$
- The half-life period for the disintegration of radioactive  ${}_{92}^{225}\text{U}$  is:**
  - $7.1 \times 10^8$  thousand years
  - $7.1 \times 10^8$  million years
  - $7.1 \times 10^8$  billion years
  - $7.1 \times 10^8$  years
- The reaction intermediate formed during the reaction  $2\text{NO} + 2\text{H}_2 \rightarrow 2\text{H}_2\text{O} + \text{N}_2$  is:**
  - $\text{NO}_2$
  - $\text{N}_2\text{O}_4$
  - $\text{NO}_3$
  - $\text{H}_2\text{O}_2$
- In the presence of  $\text{Al}_2\text{O}_3$ , formic acid is decomposed into:**
  - $\text{H}_2\text{O} + \text{CO}$
  - $\text{H}_2 + \text{CO}$
  - $\text{H}_2\text{O} + \text{CO}_2$
  - $\text{H}_2 + \text{CO}$
- The first enzyme was prepared in the laboratory in:**
  - 1869
  - 1769
  - 1965
  - 1959

Maximum Marks: 32

**(SUBJECTIVE TYPE)**

Time Allowed: 75 Min.

**SECTION-I**

**Q.2: Give brief answers to the following questions:**

**(20)**

- Define order of reaction? Give an example.
- The radioactive decay is always a first order reaction. Explain.
- What is dilatometric method for measuring the rate of reaction?
- What are the types of collisions?
- Name different methods for determining the order of reaction.

- vi. How does surface area affect the rate of the reaction? Give an example. Or Why powdered Al reacts more rapidly with cold NaOH than Al foil with warm NaOH?
- vii. Write two characteristics of a catalyst.
- viii. A finely divided catalyst may prove more effective. Give examples.
- ix. What is a promoter or activator? Give an example.
- x. How do enzymes catalyze a reaction? OR What is the mechanism of enzyme catalysis?

## **SECTION-II**

**NOTE:** Attempt All Questions:

(12)

**Q.3:** Write a note on specific rate constant or velocity constant.

**Q.4:** Explain chemical method to determine the rate of reaction.

**Q.5:** Describe half life method for finding the order of reaction.