

CHEMISTRY-11	Chapter#11-First Half (11.0 – 11.3) Test-3		
	Name:	Class:	ID:
Date: / /	Marks Total: 30	Marks Obtained:	
Time Allowed: 50 Min.			

Maximum Marks: 10 **(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.
- Half life period of ${}_{92}\text{U}^{235}$ is:**
 - 710 million years
 - 720 million years
 - 810 million years
 - 820 million years
- If a reaction occurs in several steps, the _____ step will be the rate determining step.**
 - First
 - Last
 - Fastest
 - Slowest
- The units of rate constant for zero order reaction are:**
 - Moles $\text{dm}^{-3}\text{s}^{-1}$
 - Moles $^{-1}\text{dm}^3\text{s}^{-1}$
 - Moles $^{-2}\text{dm}^6\text{s}^{-1}$
 - s^{-1}
- The hydrolysis of tert-butyl bromide is a:**
 - First order reaction
 - Second order reaction
 - Third order reaction
 - Pseudo first order reaction
- 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 reaction intermediate formed during the reaction $\text{NO}_2 + \text{CO} \rightarrow \text{NO} + \text{CO}_2$ is:**
 - N_2O_4
 - N_2O
 - N_2O_5
 - NO_3
- If one of the reactants or products has the ability to rotate the plane polarized light, the rate of such reactions can be determined by:**
 - Spectrometric method
 - Refractometric method
 - Optical rotation method
 - Dilatometric method
- Just before collision:**
 - P.E. & K.E. of the system increase
 - P.E. & K.E. of the system decrease
 - P.E. increases while K.E. decreases
 - P.E. decreases while K.E. increases
- For endothermic reaction, the E_a of reverse reaction is _____ that of forward reaction.**
 - Greater than
 - Smaller than
 - Equal to
 - All

SECTION-I

Q.2: Give brief answers to the following questions: (12)

- i. Define rate of reaction. Give its units?
- ii. Differentiate between rate and rate constant of a reaction.
- iii. What are pseudo first order reactions? Explain with an example.
- iv. Half-life period of radioactive decay is independent of the amount of the substance. Explain.
- v. What is optical rotation method for measuring the rate of reaction?
- vi. Define activated complex.

SECTION-II

NOTE: Attempt All Questions: (08)

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

Q.4: Write a detailed note on determination of rate of reaction of a chemical reaction.