

<b>CHEMISTRY-11</b>	<b>Chapter#11(Complete) Test-4</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:

- With increase of 10°C temperature the rate of reaction doubles. This increase in rate of reaction is due to:
  - Decrease in activation energy of reaction.
  - Decrease in the number of collisions between reactant molecules.
  - Increase in activation energy of reactants.
  - Increase in number of effective collisions.
- The enzyme used for hydrolysis of urea is:
  - Invertase
  - Urease
  - Lipase
  - zymase
- The chemical weathering of stone work of buildings is caused by the \_\_\_\_\_ gases in the atmosphere.
  - Acidic
  - Basic
  - Radioactive
  - All
- The units of rate constant for third order reaction are:
  - Moles dm<sup>-3</sup>s<sup>-1</sup>
  - Moles<sup>-1</sup>dm<sup>3</sup>s<sup>-1</sup>
  - Moles<sup>-2</sup>dm<sup>6</sup>s<sup>-1</sup>
  - s<sup>-1</sup>
- The hydrolysis of tert-butyl bromide is a:
  - First order reaction
  - Second order reaction
  - Third order reaction
  - Pseudo first order reaction
- If the concentration of the reactants is doubled, the half-life of a third order reaction:
  - Also becomes double
  - Becomes half
  - Becomes four times
  - Becomes one-fourth
- For exothermic reaction, the E<sub>a</sub> of reverse reaction is \_\_\_\_\_ that of forward reaction.
  - Greater than
  - Smaller than
  - Equal to
  - All
- HCl is oxidized to Cl<sub>2</sub> in the presence of:
  - Pt
  - CuCl<sub>2</sub>
  - MnO<sub>2</sub>
  - Ni

Maximum Marks: 32 **(SUBJECTIVE TYPE)** Time Allowed: 65 Min.

### SECTION-I

**Q.2: Give brief answers to the following questions: (20)**

- Rate of reaction is changing every moment. Explain.
- What is specific rate constant or velocity constant?
- What are zero order reactions? Give one example.
- Half-life period of radioactive decay is independent of the amount of the substance. Explain.

- v. The slowest step is the rate determining step. Explain.
- vi. How rate of reaction is determined by electrical conductivity method?
- vii. Define activation energy and activated complex.
- viii. Combustion occurs more rapidly in pure oxygen than in air, why?
- ix. What are enzyme catalysis? Give an example.
- x. Enzymes are highly specific in action. Justify.

## **SECTION-II**

**NOTE:** Attempt All Questions:

(12)

Q.3: Differentiate between instantaneous rate and average rate.

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

Q.5: Explain the effect of temperature on the rate of reaction by Arrhenius equation.