BRAIN INTERNATIONAL SCHOOL

Chemistry Assignment CLASS XII JULY.24

CH: 3 Chemical kinetics

Q.1 Identify the reaction order from the following rate constent,$k=2.3\times1o^{-5}L\ mol^{-1}S^{-1}$.

Q.2 Why does the rate of reaction not remain constent throughout the reaction process?

Q.3 The rate constant for a zero order reaction in A is 0.0030 $mol^{-1}S^{-1}$.How long will it take for the initial concentration of A to fall from 0.10 M to 0.075 M?

Q.4 A reaction has half-life of 10 min.

(i) calculate the rate constant for the first order reaction.

(ii) what fraction of reactant will be left after an hour of the reaction?

Assertion and reason type:

(a)If both assertion and reason are correct and reason is correct explanation for assertion.

(b)If both assertion and reason are correct but reason is not correct explanation for reason.

(c)If assertion is correct but reason is wrong.

(d)If assertion is wrong and reason correct.

Q11.Assertion: Order and molecularity of a reaction are always equal.

Reason: Complex reactions take place in steps and slowest step determines the reaction order.

Q12. Assertion; Order of reaction can be fractional.

Reason; Order of reaction can be written from the balanced chemical equation.