

Palestine Technical University - Kadoori

Faculty of Applied Sciences

Wednesday, 4/10/2013

General Chemistry Lab2	Quiz	Time allowed: 60 Min.
Name (in Arabic):		Section (day):

(Q1) A txhree trials experiment was done to determine the rate law and activation energy for the reaction of H2O2 and KI

Solution A						Solution B	
Trial	Boiled Water (ml)	Buffer (ml)	0.3 M KI (ml)	0.02 M Na ₂ S ₂ O ₃ (ml)	starch (drops	0.1 M H ₂ O ₂ (ml)	Time for color change
1	4	1	1	1	5	3	(seconds)
ı	7	ı	ı	I	3	3	130
2	3	1	2	1	5	3	65
3	1	1	1	1	5	6	65

- Determine the reaction rate for each trial?
- Determine p, q , the order of reaction with respect to $I^{\mbox{\tiny T}}$ and H_2O_2 respectively?
- Determine k' the specific rate constant for each trial?
 - What is the rate law of the reaction?