K B Raval College of Pharmacy
Second Sem. (B. Pharm.)
Internal Mid Sem. Exam.
PHYSICAL CHEMISTRY

Time: 11:00 – 12:00 Marks: 20
Dt: 31/03/09

Q.1 (A) Answer the following question. (Any Three) (9)

1) Explain langmuir adsorption isotherm with its limitation
2) State and explain Beer's-Lambert law of photochemistry
3) Derive first law of thermo dynamics
4) Explain Jablonski diagram.

(B) Answer any of following (3)

1) Differentiate following.
   Physical and chemical adsorption

Or

1) Compare properties of alpha, beta and gamma radiation

Q.2 Answer the following.

1) Define the term phase, component an degree of freedom. **(4)**
   Explain the phase diagram for condensed system.

2) Give the method of determination of order of reaction. **(4)**

Or

(A) For a first order reaction $t_{0.5}$ is 100 sec. how long will it take for the reaction to be completed 75%? **(2)**

(B) Define following terms **(2)**

1. Enantiotropy
2. Triple point
3. Surfactant
4. Heat of adsorption

----------***Best Of Luck***----------