



Symbol of Secularism
& National Integration

**ANJUMAN-I-ISLAM'S
KALSEKAR TECHNICAL CAMPUS, NEW PANVEL**

School of Pharmacy

*Approved & Recognised by: All India Council for Technical Education and Council of Architecture, New Delhi
Directorate of Technical Education, Govt. of Maharashtra Affiliated to: University of Mumbai*

**F. Y. B. Pharm. (Semester –II)
Periodic Theory Examination (2011 – 2012)**

**Subject: Physical Pharmacy
Marks: 10 M**

**Date: - 13/03/12
Time: - 11.00 am-12.00 pm**

Q1. Explain in detail factor affecting rate of a reaction? (2)

OR

Q1. Discuss in detail about spreading and spreading coefficient also drive its equation. (2)

Q2. Enlist various methods to determine surface tension of a liquid. Explain Capillary rise method in detail? (2)

OR

Q2. Write a note on Accelerated stability studies (OR) Cause of instability and there prevention. (2)

Q3. Solve the following problems: (any 2) (2)

i) The original concentration of a sample of drug was 10 mg/ml. When assayed after 10 months the concentration was found to be 5.4 mg/ml. What will be the half life of this product? (Assuming the decomposition as first order reaction).

ii) Write a note on adsorption isotherm.

iii) Write a note on Surfactants (OR) HLB Value.

Q4. Write short notes on: (any two) (4)

i) Henry's law of gas solubility and its limitation.

ii) Critical micelle concentration.

iii) Optical properties of colloids.

iv) Classification of colloids with examples.