



SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES

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PHYSICAL PHARMACEUTICS I

QUESTION BANK - UNIT WISE

UNIT-IV

Surface and Interfacial Tension

10 Marks

1. Explain the term surface tension & interfacial phenomena. Write the different methods used to measure surface tensions.
2. Explain the Freundlich and Langmuir adsorption isotherm.
3. Define surfactants. Explain classification of surfactants with suitable examples.
4. Explain Critical micellar concentration, theories of micelle formation.

5 Marks

1. Explain theory of micelle formation.
2. Write the factors influencing critical micelle concentration.
3. Define adsorption. Explain various factors affecting adsorption.
4. Write notes on Spreading coefficient with its applications
5. Hydrophilic lipophilic balance and its scale.
6. Explain pharmaceutical applications of surfactants according to HLB values.
7. Explain Do-nouy ring method.

2 Marks

1. BET equation.
2. Different types of adsorption isotherms.
3. State and explain Gibbs adsorption isotherm. Write its application.
4. Wilhelmy plate method.

5. Mechanism action of detergent.
6. Define solubilization and detergency
7. How micellar system solubilize the poorly soluble drugs?
8. State surface free energy.

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