## Second Year B. Pharm. (Annual Pattern) Examination

## PHYSICAL PHARMACY

Paper - II. T. 1 (USC - 35008)

P. Pages: 2

Time: Three Hours [Max. Marks: 80 Note: (1) All question carry equal marks. (2) Answer any Eight questions. (3) Illustrate your answer wherever necessary with the help of neat sketches. (4) Use pen of Blue/Black ink/refill only for writing the answer book. Classify complexes and describe Metal Complexes in detail. 10 Discuss the pharmaceutical applications of Rheology and add a note on types of 10 flow of liquid. Enlist and explain the derived properties of powders in detail. 10 (a) Write about interfacial properties of suspended particles. 5 4. 5 (b) Discuss electrical properties of colloids in detail. 5. (a) What is critical micelle concentration? How do you determine it by surface tension measurement? 5 (b) Describe "Zero order reaction" in detail. 5 State Fick's First Law of diffusion and describe diffusion and drug release. 10

P.T.O.

7. Enlist the factors affecting solubility of weak electrolytes and describe them.

10

- State first law of thermodynamics and describe the work of expansion at constant pressure.
- Discuss attractive forces between molecules and add a note on liquefaction of gases.
- 10. Write notes on (Any Two) :--
  - (a) Thixotrophy.
  - (b) Micellar Solubilization.
  - (c) Solute solvent interaction.

10

AV-2295