

AV – 2333

Fourth Semester B. Pharm. Examination

PHYSICAL PHARMACEUTICS – II

Paper – 4.1

(USC – 35155)

P. Pages : 2

Time : Three Hours]

[Max. Marks : 60

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- Note :** (1) All questions carry equal marks.
(2) Answer any **Five** 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.

1. (a) Discuss adsorption at Liquid – liquid interfaces. 6
(b) Describe surface active agents in detail. 6
2. Define Micromeritics, describe methods to determine particle size and add a note on applications of micromeritics. 12
3. (a) What is Fick's Second Law of diffusion ? Add a note on Steady State of diffusion. 6
(b) Write about diffusion and drug release. 6
4. (a) State Newton's law of flow and describe Cup – and – bob viscometer. 6
(b) Explain in detail thixotropy and its measurement. 6
5. Define complexes and describe methods of analysis of complexes. 12

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6. (a) Enlist the flow properties of powders. 6
- (b) Describe mechanical models to illustrate viscoelasticity. 6
7. Write notes on (Any **Two**) :—
- (a) Spreading Coefficient.
- (b) Inclusion complexes.
- (c) Apparatus used for diffusion studies. 12

