

II B. Pharmacy I Semester Supplementary Examinations, Oct/Nov - 2020

PHYSICAL PHARMACY-II

Time: 3 hours

Max. Marks: 70

- Note: 1. Question paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is Compulsory
3. Answer any **FOUR** Questions from **Part-B**
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PART -A

1. a) Give four applications of HLB scale. (2M)
- b) Note on pseudo zero order reaction with an example. (2M)
- c) Define Thixotropy & Dilatant flow. (2M)
- d) What is phase inversion and how it can be obtained? (2M)
- e) What are the applications of bulk density in pharmaceutical industry? (2M)
- f) Define zeta potential? How it is different from Nernst potential? (2M)
- g) Define Seive diameter & Volume diameter. (2M)

PART -B

2. a) Compare & contrast different type's colloidal systems. (7M)
- b) Briefly explain Donan membrane equilibrium. (7M)
3. a) Describe the methods for determination of energy of activation. (7M)
- b) Discuss about method for shelf life determination by accelerated stability studies. (7M)
4. a) Describe different graphic representations of size distribution data in a powder. (10M)
- b) Write a note on solid state degradation kinetics. (4M)
5. a) Discuss the method for determination of viscosity by Ostwald's viscometer and its practical considerations. (10M)
- b) Write a note on Newtonian systems. (4M)
6. a) Write about protective colloidal action of hydrophilic colloids. (7M)
- b) Discuss about Sedimentation method for particle size determination in suspension. (7M)
7. Explain in detail about adsorption isotherms of solid surface adsorption. (14M)