

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 **THREE** Questions from **Part-B**
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PART -A

1. a) Write a note on solubility of gases in liquids. (4M)
- b) Write a note on oxidative degradation of compounds and preventive measures (4M)
- c) Write a note HLB classification. (4M)
- d) Describe one method to determine bulk density of powder. (4M)
- e) Describe thixotropical behaviour of emulsions. (3M)
- f) Define colloids and classify them. (3M)

PART -B

2. a) Explain the factors influencing solubility of solids in liquids. (8M)
- b) Describe solute –solvent interactions. (8M)
3. a) Explain effect of temperature on degradation of compounds. (8M)
- b) Derive an equation to determine zero order rates constant and half life. (8M)
4. a) Explain the working principle of stalagmometer with a neat sketch. (8M)
- b) What are the assumptions involved in Langmuir adsorption isotherm. Deduce the equation for it. (8M)
5. a) Describe anyone method to determine particle size of powders. (8M)
- b) Explain the significance of derived properties in pharmaceutical dosage forms. (8M)
6. a) Differentiate shear thinning and shear thickening systems. (8M)
- b) Explain the working principle of Ostwald's Viscometer with neat sketch. (8M)
7. a) Describe any two kinetic properties of colloids. (8M)
- b) Discuss Donnan membrane equilibrium method. (8M)