Code No: PHR16213   (R16)   (SET - 1)

II B. Pharmacy I Semester Supplementary Examinations, May - 2019
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) Define bulk density and give its significance.   (2M)

    b) Differentiate flocculated and deflocculated suspensions.   (2M)

    c) Derive a linear expression for first order reaction.   (2M)

    d) Define the following: (2M)
        (a) Gold number   (b) Zeta potential

    e) Discuss about HLB scale.   (2M)

    f) Write about dilatant flow of liquid.   (2M)

    g) Discuss about pseudo zero order reaction with examples.   (2M)

PART –B

2. a) Describe various methods for determination of order of reaction.   (9M)

    b) Discuss about effect of temperature on rate of reaction.   (5M)

3. a) Discuss about theories of emulsification.   (7M)

    b) Discuss about physical stability of suspensions.   (7M)

4. a) What is thixotropy and discuss the determination methods of thixotropy.   (10M)

    b) Discuss about sensitization and protective action of hydrophilic colloids on   (4M)
        hydrophobic colloids.

5. a) Define true volume and true density and describe the principle and method for   (10M)
        determination of true density.

    b) Write a note on %compressibility index.   (4M)

6. a) Compare and contrast various types of colloidal systems.   (7M)

    b) Discuss about Donnan membrane equilibrium.   (7M)

7. a) Discuss about various types of adsorption isotherms.   (10M)

    b) Write a note on spreading coefficient.   (4M)