P-014-003201 Seat No. _____

Master of Pharmacy Management (Sem. II) Examination

June / July - 2018

Physical Pharmacy (Theory) : BP - 205

Faculty Code : 014
Subject Code : 003201

Time : **3** Hours] [Total Marks : **80**

Instructions : (1) Draw neat and clean diagrams as required.
(2) Figures to the right indicates marks.
(3) Answer the three (3) questions from each section.
(4) Question one (1) and question five (5) are compulsory.

SECTION - I

1 Write any **seven** of the following : **14**

(a) Enlist the parameters of solubility of solid in liquids.
(b) Differentiate ideal and real solution.
(c) Define contact angle.
(d) Write on zeta potential.
(e) What is thixotrophy and negative thixotrophy ?
(f) What do you mean by Hausner's ratio and Carr's Index ?
(g) What is spreading coefficient ?
(h) Define : Martin's Diameter and Projected area diameter.
(i) What is significance in case of angle of repose ?
(j) Enumerate methods of determining particle size.

2 (a) Discuss the two component systems containing solid and liquid Phases. **7**

(b) Define surface tension. Discuss factors affecting Surface tension. **6**

3 (a) Write a note on organic molecular complexation method with example. **7**

(b) What are derived properties of Powder ? Discuss Porosity and Density in detail. **6**

4 (a) Differentiate types of colloidal dispersion system and give its applications. **7**

(b) Describe the theory of emulsification. **6**

SECTION - II

5 Write any two of the following : **14**

(a) Write a note on applications of complexation in pharmacy with suitable examples.

(b) Write a note on physical stability of emulsion.

(c) Explain the methods for determining surface area.

6 (a) Classify viscometer. Write in detail on any one viscometer. **7**

(b) Enlist methods used to determine of Surface tension. Discuss any one method in detail. **6**

7 (a) Describe solubility of gases in liquids. **7**

(b) Differentiate flocculated and deflocculated suspension. **6**

8 (a) What are association colloids ? Mention the mechanism of formation of micelles. **7**

(b) Describe Newtonian and Non Newtonian system. **6**
