Code: 15R00404 **R15**

B.Pharm II Year II Semester (R15) Regular & Supplementary Examinations May/June 2018

PHYSICAL PHARMACY – II

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) What is solubility of gases in liquids?
(b) Define Fick's second law.
(c) Define HLB.
(d) What is Langmuir's isotherm?
(e) Explain about specific surface area.
(f) Give an account on bulkiness of a powder.
(g) Define kinematic viscosity.
(h) Write short account on non-Newtonian systems.
(i) Define suspension.
(j) Define emulsion.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Describe in detail on the solubility of liquids in liquids.

OR

3 Explain the methods to analyze the complexes. Write a note on the application of complexation in pharmacy.

UNIT – II

4 Explain in detail the techniques used for the measurement of adsorption at liquid interfaces.

OR

5 Describe in detail on the electrical properties of interfaces.

UNIT – III

6 Explain the method of particle size determination using sedimentation method.

OR

7 How will you determine the surface area of a particle? Explain the techniques involved.

UNIT – IV

8 Explain the construction and working of a capillary viscometer with a suitable diagram.

OR

9 Explain the construction and working of a falling ball viscometer with a neat diagram.

UNIT – V

10 Write a note on the types of collards with its application in pharmacy.

OR

11 Explain the types of suspension. Write in brief on the sedimentation parameter in a suspension.

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