FirstRanker.com Firstranker's choice www.FirstRanker.com www.FirstRanker.com

Subject Code: B132201/R13

II B. Pharmacy II Semester Regular Examinations April - 2017

PHARMACEUTICAL UNIT OPERATIONS-II

Time: 3 hours **Max. Marks: 70**

Question Paper Consists of **Part-A** and **Part-B**
Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**
*****

PART-A

1. (a) What are Black body and Grey body?
   (b) Write the concept of phase equilibrium in evaporation.
   (c) Define azeotropic and extractive distillation.
   (d) Explain the Drying Curve with graphical representation.
   (e) Explain modes of stress applied in size reduction.
   (f) Write the principle involved in sigma blade mixer.

[4+3+4+4+3+4]

PART-B

2. (a) What are Heat exchangers? Describe multi pass tubular heater.
   (b) Write a note on boiler capacity.
   (c) Explain properties of steam. [8+5+3]

3. Describe the multiple effect evaporators and give a note on its economy. [16]

4. (a) Write short note on lyophilisation.
   (b) Write principle of molecular distillation.
   (c) Write the principle, construction and working of water for injection apparatus. [5+5+6]

5. (a) Write principle, construction and working of Tray Dryer and its applications.
   (b) Write principle, construction and working of Fluidized Bed Dryer. [8+8]

6. (a) Write a note on Laws governing for size reduction.
   (b) Write principle, construction and applications of hammer mill and Fluid energy mill.

[4+12]

7. (a) Write principle, construction and working of any one liquid - liquid mixing equipment.
   (b) Write a note on any one equipment used for liquid-solids mixing and write their applications in Pharmaceutical industry. [8+8]

*****

www.FirstRanker.com

www.FirstRanker.com