

**FACULTY****B. Pharmacy 2/4 II Semester (Non CBCS)(Backlo) Examination, July 2019****Subject : Pharmaceuticals Enineerin II****Time : 3 Hrs****Max. Marks: 70*****Note: Answer all questions. All questions carry equal marks.***

- 1 (a) How the particle size and its distribution of pharmaceutical powders are determined by sievin method? (8)  
(b) Explain the construction, workin and applications of Rotex screen. (6)  
**OR**  
(c) Compare and contrast between air separator and cyclone separator with the help of diarams. (8)  
(d) Write the construction and workin principle of hammer mill. (6)
- 2 (a) Describe the factors influencin evaporation process. (7)  
(b) Explain the theory, construction and workin of steam distillation unit. (7)  
**OR**  
(c) Describe the enery and material balances in evaporation process. (6)  
(d) Write the theory involved in azeotropic distillation and mention the construction and workin of distillation under reduced pressure. (8)
- 3 (a) Write the importance of as ab sorption and different types of Towers alon with their packin. (6)  
(b) Explain the construction, workin and application of freeze dryer. (8)  
**OR**  
(c) Explain the cakin of crystal and its prevention. (6)  
(d) Explain the construction, workin and application of Swenson Walker crystallizer. (8)
- 4 (a) Explain the construction, workin and applications of triple roller mill. (7)  
(b) Write the principle, construction and workin of Zi za mixer. (7)  
**OR**  
(c) Explain the types of ion exchane process alon with the applications in pharmacy. (7)  
(d) Write abt Vortex formation and its prevention techniques with the help of diarams. (7)
- 5 (a) What are the applications and drawbacks of automatic process control? (4)  
(b) Write the techniques for measurement of pressure and temperature. (10)  
**OR**  
(c) What are forces involved durin compaction and mention their measurement techniques? (10)  
(d) Write the importance of Huckle plots in tablet compression. (4)

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