

**Subject Code: B132101/R13****SET-1****II B. Pharmacy I Semester Supplementary Examinations, May - 2019****PHARMACEUTICAL UNIT OPERATIONS-I****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) Differentiate between Orificemeter & Venturimeter.
(b) Classify different material handling systems with examples.
(c) Define Centrifugation and classify Centrifuges.
(d) Write a note on Swenson Walker crystallizer.
(e) Define humidity and dew point temperature.
(f) Define Corrosion. Write the applications of material used for plant construction w.r.t stainless steel.

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

PART-B

2. What are the different types of valves used in transportation of fluids? Describe in detail about any two. [16]
3. (a) Discuss the construction and applications of Belt conveyor & Screw conveyor.
(b) Write a note on types of fans. [10+6]
4. (a) Describe the construction and working of Plate & frame filter press.
(b) Describe the construction and working of any one Centrifugal filters. [8+8]
5. (a) Explain the construction and working of Agitated Batch crystallizer.
(b) Describe various characteristics of crystals and factors affecting it. [6+10]
6. (a) Mention the applications of Refrigeration.
(b) Explain the methods for measurement of Humidity. [4+12]
7. (a) Write about Fire Hazards and their prevention.
(b) Explain the properties and applications of materials used for plant construction w.r.t glass. [8+8]

