Total No. of Questions: 10]

[Total No. of Printed Pages

## PHARMACEUTICS-II (Unit Operations-I)

(B. Pharmacy, 3rd Semester, 2123)

Time: 3 Hours

Maximum Marks: 80

Note: This paper consists of Three Sections.

Section A is compulsory. Attempt any four questions from Section B. Attempt any three questions from Section C.

Section-A

Marks: 2 Each

- Answer the following questions in 2-5 lines each:
  - (a) Define Yield.
  - (b) Write Bernoulli's Equation.
  - (c) What is Humid Volume?

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- (d) What is meant by air conditioning?
- (e) enlist different types of gas handling devices.
- (f) What is the function of pneumatic conveyors?
- (g) Name different types of valves used in industry.
- (h) Name some industrial filters.
- (b) What are centrifugal sedimenters?
- (i) What is meant by caking of crystals?
- (k) What are adiabatic saturation curves?
- (I) What are the different equipments used for measuring pressures?
- (m) Give composition of Stainless Steel (SS-316).
- (n) Enlist various characteristics of crystals.
- (b) Differentiate between laminar and turbulent flow.

Section-B

Marks: Each

- 2. What is meant by Corrosion? Give various methods to prevent corrosion.
- 3. What are Flow Meters? Explain the working of venturimeter.
- 4. Explain the working and construction of Reciprocating Pumps
- 5. What are the factors which affect filtration? Explain the components of cycle time in balon filters.
- 6. What are psychrometric charts? How are they useful in Pharmacy?

Section-C Marks: 10 Each

- 7. Explain the terms : relative humidity, dry bulb temperature, adiabatic saturation curves and dehumidification.
- 8. Explain different types of possible hazards in industry and ways to prevent them.

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- What is meant by yield? Explain how yield of Swenson Walker crystallizer is calculated.
- 10. (a) What are solubility curves? How are they helpful in calculating yield?
  - (b) Explain the working of filter press. 5,5