

Roll No. ....

Total No. of Questions : 10]

[Total No. of Pages : 02

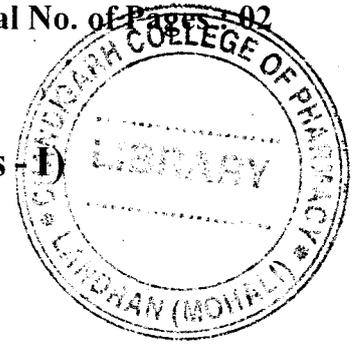
**B.Pharmacy (Sem. - 3<sup>rd</sup>)**

**PHARMACEUTICS - II (Unit Operations - I)**

**SUBJECT CODE : PHM - 2.3.1**

**Paper ID : [D0112]**

[Note : Please fill subject code and paper ID on OMR]



**Time : 03 Hours**

**Maximum Marks : 80**

**Instruction to Candidates:**

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Three** questions from Section - C.

**Section - A**

**Q1)**

**(15 × 2 = 30)**

- a) Unit operations.
- b) Reynold's number.
- c) Filter aids.
- d) Air Conditioning.
- e) Flow meters.
- f) Corrosion.
- g) Crystal habit and crystal forms.
- h) Viscosity.
- i) Dry bulb temperature and wet bulb temperature.
- j) Industrial dermatitis.
- k) Psychrometry.
- l) Dew point.
- m) Bernoulli's theorem.
- n) Caking of crystals.
- o) Darcy's equation.

**Section - B**

**( 4 × 5 = 20 )**

- Q2)** Differentiate between orifice meter and venturimeter.
- Q3)** Write short note on the importance of crystallization in pharmaceutical preparation.
- Q4)** Write short note on filter medium.
- Q5)** What are various factors that affect the choice of material for plant construction?
- Q6)** Write a note on the application of humidity measurement in pharmacy.

**Section - C**

**( 3 × 10 = 30 )**

- Q7)** Classify manometers. Derive an equation for the measurement of pressure difference in differential manometer.
- Q8)** Write short notes on any two :
- (a) Mier's supersaturation theory.
  - (b) Conveyors.
  - (c) Pumps.
- Q9)** (a) Write an account on the application of refrigeration.  
(b) Write an account on the safety aspects from dust hazards.
- Q10)** Explain the principle, construction and working of plate and frame press.

