

(LK 4259)

FEBRUARY 2017

Sub. Code: 4259

**B.PHARM. EXAMINATION  
SECOND YEAR  
PAPER IV – PHARMACEUTICAL TECHNOLOGY**

*Q.P. Code: 564259*

**Time: Three hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Write the principle, construction, working, application, merits and demerits of freeze drying.
2. a) Describe the principle and factors affecting size reduction.  
b) Discuss in detail ball mill.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Describe with a diagram 'Venturimeter'.
2. Discuss the principle underlying centrifugation.
3. Describe Mier's Theory of super saturation.
4. Explain the principle of steam distillation process.
5. Principle and applications of Air-condition.
6. Types of measurement of flow of Fluids.
7. Multiple effects Evaporator.
8. Gear pump.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Application of stainless steel material in pharmacy.
2. What is azeotropic distillation?
3. Define nucleation in crystallization.
4. Define Humidity.
5. Define Bernouli's Theorem.
6. Define Valve.
7. Different sources of Heat.
8. Eutectic Point.
9. Define filtration.
10. Crystal Lattice.

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