[BPHARM 1022]   **OCTOBER 2022**   Sub. Code: 2037
(MARCH 2022 EXAM SESSION)

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)
PCI Regulation 2017 – SEMESTER III
PAPER IV - PHARMACEUTICAL ENGINEERING
Q.P. Code: 562037

Time: Three hours   **Maximum: 75 Marks**

I. Elaborate on: Answer any TWO questions.   **(2 x 10 = 20)**

1. Explain in detail the methods of heat transfer and its applications.
2. Draw the diagram, principle, working and its applications of steam distillation.
3. Define Evaporation and Factors affecting evaporation.

II. Write notes on: Answer any SEVEN questions.   **(7 x 5 = 35)**

1. Discuss the theories of drying.
2. Bernoulli's Theorem.
3. Forced circulation evaporator.
4. Discuss the theories involved in the fluid flow.
5. Fluidized bed drier.
6. Discuss the theories involved in the corrosion.
7. Write in detail the double cone blender.
8. Principle involved in the Centrifugation.
9. Factors affecting size reduction.

III. Short answers on: Answer ALL questions.   **(10 x 2 = 20)**

1. Manometer.
2. Reynolds number.
3. Stefen-Boltzman law.
4. Equilibrium Moisture Content.
5. Lyophilization.
6. Galvanic cell.
7. Super Centrifuge.
8. Filter Aids
9. Types of corrosion.
10. Types of mixtures.

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