(LN 4259)   **AUGUST 2018**   Sub. Code: 4259

B.PHARM. DEGREE 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. a) Explain the construction, working and applications of climbing film evaporator.
    b) Write factors influencing the rate of evaporation.

2. a) Write the applications of size reduction.
    b) Describe the construction, working, advantages and disadvantages of freeze Dryer.

II. Write notes on: **(8 x 5 = 40)**

1. Explain the working of a cyclone separator and its usefulness.
2. Write note on Humidity chart.
3. Describe the construction and working of a triple roller mill.
4. Give five pharmaceutical applications of industrial centrifuges.
5. Describe the principles, working and applications of steam distillation.
6. What is corrosion? Write the types of corrosion. How can corrosion be prevented?
7. Describe the working of a refrigerator.
8. Explain the principle and working of colloidal mill.

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

1. What are various grades of powders?
2. Darcy's law.
3. What are filter aids? Give examples.
4. Define flash distillation.
5. Classify dryers.
6. What is calandria?
7. Mechanisms of heat transfer.
8. Define humidification.
9. Applications of stainless steel in pharmaceutical industry.
10. Mechanisms of liquid mixing.

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