

**B. Pharmacy (Fourth Semester)**  
**EXAMINATION, April-May, 2015**  
**(New Scheme)**

**PHARMACEUTICS—VI**

**(Pharmaceutical Engineering—I)**

Time : Three Hours ] [ Maximum Marks : 70

Note : Attempt all the five questions. All questions carry equal marks.

1. Define the term corrosion. Explain various types of corrosion. What are the preventive measures to avoid corrosion? 2, 6, 6

Or

What are different types of flow of fluid? Describe Reynolds experiment and explain Bernoulli's theorem in detail. CSVTUonline.com 2, 6, 6

2. (a) Define Fourier's law. Explain natural and forced convection for heat transfer. 2, 5

(b) Write a note on conveyors. 2, 5

3. Explain with example of the following : 3

(i) Unit operation

P. T. O.

- (ii) Unit process CSVTUonline.com 4  
(iii) Material and energy balances 7

Or

What is psychometric chart? Explain the working of air conditioner. Mention the application of air-conditioner in pharmaceutical manufacturing. 2, 9, 3

4. Write notes on the following :

- (a) Computer aided manufacturing 5  
(b) Process variables 4  
(c) Wet bulb theory 5

Or

What are the factors that influence selection of materials for plant construction? Classify the materials used for plant construction. 7, 7

5. Discuss the concept of pilot plant scale up technique in pharmaceutical industries. CSVTUonline.com 14

Or

Discuss fire and dust hazards in pharmaceutical industries and their safety measures. 14