(2063)

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B. Pharmacy 4th Semester Examination

Pharmaceutics-III

HBP-202

Time : 3 Hours   **Max. Marks : 80**

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/ continuation sheet will be issued.

Note: Attempt five question in all, selecting one question from each of the section A, B, C & D and all the subparts of the question in Section E.

SECTION - A

1. Define ideal gas law. Write about basic postulates of kinetic theory of gas. Explain deviation from ideal behaviour.   **(16)**

2. Discuss the use of steam as heating media. How boiler capacity can be determined?   **(16)**

SECTION - B

3. With the help of diagram discuss the principle, Construction & working of climbing film evaporator.   **(16)**

4. How number of theoritical plates can be calculated using McCabe-Thiele method?   **(16)**

SECTION - C

5. Explain in detail about various convection dryers with special emphasis on Principle & Working.   **(16)**

6. (a) Write about mechanism & applications of size separation. **(6)**

   (b) Write in detail about sieving & cyclone separator. **(10)**

SECTION - D

7. Explain theory of mixing. Write in detail about various mixers used for solid-solid mixing. **(16)**

8. (a) Write about various factors to be considered while designing a reactor. **(6)**

   (b) Write about construction & working of fermentor. **(10)**

SECTION - E

9. (a) Explain stoke's law. **(2)**

   (b) Define Azeotropes. **(2)**

   (c) Write about application of freeze drying. **(2)**

   (d) Define FML & LOD. **(2)**

   (e) Define conduction & convection. **(2)**

   (f) Define stoichiometry. **(2)**

   (g) What is flash distillation. **(2)**

   (h) Classify powder according to B.P. standards. **(2)**