



বিদ্যাসাগর বিশ্ববিদ্যালয়  
**VIDYASAGAR UNIVERSITY**  
**Question Paper**

**B.Sc. Major Examinations 2022**  
(Under CBCS Pattern)  
**Semester - IV**  
**Subject : INDUSTRIAL CHEMISTRY**  
**Paper : C 8-T**

**Introduction to Chemical Engineering and Mass Transfer Operations**

**Full Marks : 40**

**Time : 2 Hours**

*Candidates are required to give their answers in their own words as far as practicable.  
The figures in the margin indicate full marks.*

**Group - A**

- A. Answer any **four** of the following questions : 5×4=20
1. State Raoult's law. What do you mean by steam distillation and vacuum distillation? 2+3
  2. Write down the main criteria of solution for gas absorption. Write down the basic characteristics of packed columns and plate columns. 2+3
  3. Describe the basic principle of Rotary filter and Centrifugal Filtration. 2½+2½
  4. Write down the short note on screw conveyor and pneumatic conveyor. 2½+2½
  5. Explain the mechanism of Batch and Continuous sedimentation. 2½+2½

P.T.O.

6. Write down the flow sheet diagram of solid-liquid extraction.

5

**Group - B**

B. Answer any *two* of the following questions :

10×2=20

1. Write an explanatory note on Conveyor Belt. Discuss the method of size separation of solids. 5+5
2. Discuss the basic factors affecting rate of leaching. Write down short note on froth floatation and Jigs. 5+5
3. Write down the principle and applications Tray dryers and Rotary dryers. Discuss the classification of Crystallizers. 3+3+4
4. Write down the methods of Operating Crusher and Size separation of solids. 5+5

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