

SARDAR PATEL UNIVERSITY
T.Y.B.Sc. Industrial Chemistry
(Semester – VIth) EXAMINATION
11th March 2017, Saturday
Course No: US06CICH06
(Mass Transfer Operations)



Total Marks:25

Time: 11:00 to 12:30

Q.1: Answer the given multiple choice questions.

[3]

1. Rayleigh equation is valid for
 - a. Differential distillation
 - b. Flash distillation
 - c. Continuous distillation
 - d. Azeotropic distillation
2. The function of knife spreader in drum dryer is to.....
 - a. Remove impurity
 - b. Scrap the solid from surface
 - c. Develop thin film of solid
 - d. None of these
3. In Krystal crystallizer supersaturation is achieved by.....
 - a. Evaporation
 - b. Cooling
 - c. Adiabatic Evaporation
 - d. None of these

Q.2: Attempt any two:

[4]

1. Give the limitations of McCabe-Thiele method.
2. Give the characteristics of tower packing.
3. Explain equilibrium moisture content and critical moisture content.

Q.3: Answer the following questions:

[6]

Derive the q-line equation.

OR

Write a note on Flash distillation with a sketch.

Q.4: Answer the following questions:

[6]

Give the comparison of gas absorption and distillation.

OR

Explain construction and working of agitated crystallizer with a neat sketch.

Q.5: Answer the following questions:

[6]

Write a note on Spray dryer with a neat sketch.

OR

Write a note on Tunnel dryer with a neat sketch.