

Thapar Institute of Engineering and Technology
DEPARTMENT OF CHEMICAL ENGINEERING

Sub Code: UCH502 Sub Name: Mass Transfer-I

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Tute Sheet-9
Crystallization

Q1. 900 kg of ferrous sulphate solution with a solute content of 40% is available, If it is cooled to 10°C, find out the weight of crystal formed and yield of the crystal with the crystal of the form $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$.

Q2. A 35% solution of sodium carbonate weighing 6000 kg is cooled to 10°C to yield crystals of $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$. During cooling 4% by weight of original solution is lost due to vaporization. Find out the weight of crystal formed.