

AL-Qadisiya University
College of Engineering
Chemical Engineering Dept.
Final Examination 2nd attempt 2014-2015
Examiner : A. A. Ubeed



Subject: *Chemical Industries*
Class: 3rd Year
Time : 3 hours
Max. Marks: 60 Marks
Date: 10 / 9 / 2015

Answer Four Questions (15 Marks for each question)

Q1/ Answer one of the following :

- 1- Sketch a simple flow sheet to the soap plant.
- 2- Sketch a simple flow sheet to the CO₂ production plant from fermentation process.

Q2/A/ What are the main steps to produce :

- 1- Sugar from Sugarcane?
- 2- Cement from clay& limestone?

B/ What are the methods for production of the Hydrogen gas?

Q3/A/ Define the following:

Cullet, Hydration, Bagasse, Press cake

B/ Complete the following table depending on the Clinker formation:

Temperature °C	Reaction	Heat Change
100		
500 and above		
900 and above		
900 and above		
900 – 1200		
1250 – 1280		
1280 and above		

Q4/ Name the common pretreatment methods to remove or reduce the following impurities from water:

Suspended solid, b- Dissolved solids, c- Dissolved gases.

Q5/ Describe the following: The Clinker, the Resin

Good Luck

