

A D PATEL INSTITUTE OF TECHNOLOGY
DEPARTMENT OF FOOD PROCESSING TECHNOLOGY
INTERNAL EXAMINATION

Subject: CH 101 (Chemistry- GTU)

Date: 22.09.08 (Monday)

Time: 01 Hour (8-9 am)

Max. Marks: 20

- Instructions:** 1. Cutting/Overwriting may not be checked.
2. Answer briefly & to the point
3. Attempt all questions.

- Q1 (a) Define following terms [1]
Sludge, Scale, ppm and degree French
- (b) Fill the following Blanks in sentences [1]
❖ The -----, ----- (with units) amount of hardness salts remains in water after zeolite and soda-lime softening process respectively
❖ Chemical formula of Lime is-----and Soda is -----
❖ -----salt level is with zeolite/ ion exchange softening process
- (c) Write chemical formula of **any four** from the following [1]
Chloramines, Ozone, Calcium carbonate, Soap (general),
Calcium salt for scale, Magnesium ions salt for hardness
- Q2 Answer the following:
- (a) What are methods for disinfection of drinking water [1]
(b) Define desalination, write name of technique used for desalination [1]
(c) How will you calculate Ca Co₃ equivalent hardness? [1]
(d) State various conditioning treatments for prevention of scale formation [1]
- Q3 Answer the following
- (a) Give definition of Metal, Non metal & alloy & give example of each. [1]
(b) What is the process of heat treatment of steel? Describe the process of heat treatment in detail. [3]
(c) What is corrosion? Describe the galvanic corrosion in details & give mechanism behind it. [3]
- Q4 Answer the following
- (a) Describe the caustic embrittlement in details for stress corrosion. [2]
(b) What are the characteristics of good fuels? [2]
(c) What is lubrication? What are the functions of lubricants? [2]