

V.P. & R. P. T. P. SCIENCE COLLEGE

B. Sc. (Semester - V) Examination

INDUSTRIAL CHEMISTRY

01st October 2013, Tuesday

COURSE NO: **US05CICH02** (UNIT PROCESS IN ORGANIC MANUFACTURE)

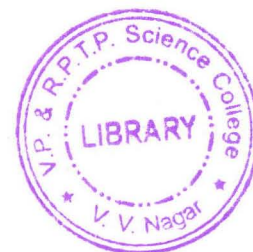
TIME: 3.30 TO 5.00 PM.

TOTAL MARKS – 30

Q.1 Answer the following Multiple Choice Questions.

(06)

- Which one of the following is a unit operation?
A. Oxidation
B. Coupling
C. Electrolysis
D. Non of these.
- A vortex type of agitation is done in
A. Schimidnitration.
B. Biazzi nitration.
C. Both of them.
D. None of them.
- Fuming Sulfuric acid is
A. $H_2SO_4+SO_3$
B. $H_2SO_4+H_2O$
C. H_2SO_4+Cl
D. All of these
- Benzoyl Peroxide is obtained by reacting a
A. $2C_6H_5COCl+Na_2O_2$
B. $2C_6H_5CH_2Cl+Na_2O_2$
C. $2C_6H_5CH_2COCl+Na_2O_2$
D. $2SO_2Cl+Na_2O_2$
- $R-COOH+SOCl_2 \rightarrow ?$
A. $R-COCl$
B. $R-Cl$
C. $R-SO_3H$
D. None of these
- _____ is used as a catalyst in preparation of monochloroacetic acid.
A. Phosphorous trichloride
B. $AlCl_3$
C. $FeCl_3$
D. None of these



Q.2 Answer the following short questions (Any Three)

(06)

- Write different functions of H_2SO_4 in mixed acid.
- Give effects of nitrous acid on nitration.
- Define the terms Sulfonation and Sufocholrination.
- Write about chromic acid as an oxidizing agent.
- Outline the catalyst used for Hydrogenation reaction.
- Write mechanism for electrophilic substitution chlorination reaction.

Q.3 Discuss the manufacturing of Nitrobenzene by continuous process using fortified spent acid.

(06)

OR

Q.3 Give manufacturing process for Aniline by Bechamp Reduction.

(06)

Q.4 Write commercial manufacture of Benzene sulfonic acid.

(06)

OR

Q.4 Give an an account of different types of oxidizing agents and oxidative reaction.

(06)

Q.5 Write note on "Hardening of vegetable oil".

(06)

OR

Q.5 Discuss the commercial manufacture of Monocholoacetic acid.

(06)