

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV (New) EXAMINATION – WINTER 2015

Subject Code: 2142809**Date: 01/01/2016****Subject Name: Chemistry of Intermediates & Dyes****Time: 2:30pm to 5:00pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Enlist different unit process. Explain Sulphonation and desulphonation unit processes. **07**
(b) Write a note on Color and its chemical constitution. **07**
- Q.2** (a) Enumerate different reduction methods of Nitro compounds. Explain any two in detail **07**
(b) Describe Valence bond theory in detail **07**
OR
(b) Discuss about Molecular orbital theory. **07**
- Q.3** (a) Give the synthesis of following Intermediates: **07**
(a) Schaffer acid
(b) Sulphanilic acid.
(b) What is Halogenation? Describe Chlorination in detail with examples. **07**
OR
- Q.3** (a) Describe Dow and Cumene process in detail. **07**
(b) What is Oxidation? Describe vapor phase oxidation in detail. **07**
- Q.4** Write notes on: **14**
(a) Coal-tar distillation
(b) Friedal- Craft's reaction.
OR
- Q.4** Describe detail classification of dyes according to its application. **14**
- Q.5** (a) Write notes on: Buchere Reactions **07**
(b) Write Note on: Nomenclature of dyes **07**
OR
(a) WRITE NOTE ON: Non Textile uses of dyes **07**
(b) Write Note on: Armstrong's Theory **07**
