

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – SUMMER 2013****Subject Code: 152802****Date: 16-05-2013****Subject Name: Technology of Dyeing-I****Time: 10.30 am - 01.00 pm****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) Answer the following objectives: **07**
1. Where Direct Dye is largely used ?
 2. What are Basic Dyes ? What is its outstanding properties ?
 3. What are HE class of Reactive Dyes ?
 4. Why solution of Reactive Dyes cannot be stored for any length of time.?
 5. Generally _____ moles of acid is taken for diazotization.
 6. What is the most favoured pH during Coupling ?
 7. What are Fast salts ?
- (b) Enlist different after treatments given to direct dyed Cotton fabric .Describe any two of them. **07**
- Q.2** (a) Answer in short : **07**
- i. Give major two classes of Vat dyes
 - ii. What are Solubilised Vat dyes ?
 - iii. Give some trade names of Solubilised Vat Dyes.
 - iv. Which shades are popular in Sulphur Dyes ?
 - v. What are Mineral Colours.
 - vi. Define Denim fabric.
 - vii. Why indigo Blue is used in Denim dyeing ?
- (b) Discuss Rope Dyeing method of Dyeing Indigo Blue on Denim. Compare and Contrast with another method. **07**
- OR**
- (b) Describe Dyeing of Mixed shades on Denim. **07**
- Q.3** (a) Discuss in detail different steps in the development of Azoic Colour. **07**
- (b) Explain stripping method of this colour. **07**
- OR**
- Q.3** Describe Dyeing of Mineral Khaki on Cotton Drill fabric. Give its advantages & limitations. **14**
- Q.4** (a) Describe principle of application of Vat dyes on Cotton. **07**
- (b) Give stripping method of this dye. **07**
- OR**
- Q.4** (a) Explain the Chemistry & application of Chlorotriazine Dyes on Cotton. **07**
- Q.4** (b) Explain Vinyl Sulphone Dyes. **07**
- Q.5** Attempt any Two short notes on : **14**
1. Sulphur Black Tendering
 2. Pigment Dyeing
 3. Bifunctional Reactive Dyes
 4. Faults & Remedies in Cotton Dyeing
