

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Subject code: 132904**Date: 05-01-2013****Subject Name: Textile Processing-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) Classify dyes according to their applications and state the name of suitable dyes for textile fibres. **07**
(b) Explain the functions of bleaching department with sequence of processes carried out on grey fabric. **07**
- Q.2** (a) Discuss the damage to the cotton fabric in processing department with effects of acids, alkalis and oxidizing agents. **07**
(b) What is dyeing? Explain the objectives of a dyeing department. **07**
- OR**
- (b) Explain the following terms and establish relationship among them. **07**
1. shade percentage 2. M.L.R 3. Concentration and exhaustion of a dyeing bath.
- Q.3** (a) Discuss why sodium hypochlorite bleaching is carried out at pH 10-11. **07**
(b) Explain enzyme desizing with characteristics, process parameters and methods. **07**
- OR**
- Q.3** State and discuss hydrogen peroxide bleaching recipe and process conditions. **14**
- Q.4** Describe in detail dyeing process of any two dyes from the followings. **14**
1. Reactive 2. Vat 3. Naphthol 4. Direct
- OR**
- Q.4** (a) Explain important factors and precautions in package dyeing and describe any one package dyeing machine. **07**
(b) Describe jigger dyeing machine. **07**
- Q.5** (a) Explain scouring process with functions and process parameters. **07**
(b) Describe dyeing of polyester /cotton blend fabric. **07**
- OR**
- Q.5** (a) Explain shearing and singeing with details of machines and type of fibres **07**
(b) Describe jet dyeing machine. **07**
