

GUJARAT TECHNOLOGICAL UNIVERSITY**BE SEM-VI Regular Examination May 2011****Subject code: 162802****Subject Name: Analytical Textile Chemistry- II****Date: 17/05/2011****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) In brief, explain the method for determination of Copper number. **07**
(b) Describe , Dean and Stark method for moisture content of a sizing softener. **07**

- Q.2** (a) Describe elaborately, the Drave's test for wetting agents. **07**
(b) Give the methods for evaluation of Poly vinyl alcohol size adhesive for degree of hydrolysis and adhesive strength. **07**

OR

- (b) Describe the test methods for quantification of color and identification of source of starch. **07**

- Q.3** (a) Give in brief the test methods for evaluation of mild oxidizing agent and sequestering agent EDTA. **07**
(b) Describe liquification and performance methods for evaluation of an enzymatic desizing agent. **07**

OR

- Q.3** (a) Elaborately discuss the methods for evaluation of leveling agents. **07**
(b) Describe the method for testing cationic dye fixing agents. **07**

- Q.4** (a) With significance, describe the methods for determination of purity of dyes. **07**
(b) Give the methods for determination of cold soluble matter and tack index of a printing thickener. **07**

OR

- Q.4** (a) Describe the method for quantitative evaluation of Sodium alginate. **07**
(b) Give test methods for evaluation of dispersing agent and a carrier. **07**

- Q.5** (a) What is the significance of analyzing textiles for formaldehyde content? **07**
Give the method to determine free formaldehyde content.
(b) Describe the test methods involved in analysis of silicone emulsion softener. **07**

OR

- Q.5** (a) Explain qualitative and quantitative analysis of polyethylene emulsions. **07**
(b) In brief explain the method for determination of phosphorus content of flame retardant textiles. **07**
