

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI • EXAMINATION – SUMMER 2013****Subject Code: 162802****Date: 27-05-2013****Subject Name: Analytical Textile Chemistry- II****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 **objective** questions. **10**
- i. Name the two methods for determination of moisture content.
 - ii. Name the two synthetic sizing agents.
 - iii. What is the function mutton tallow in sizing?
 - iv. Expand RIMI to its full form
 - v. What is function of sequestering agents?
 - vi. Resist salt works as _____ agent.
 - vii. Differentiate between NVC and active content.
 - viii. What is the chemical name of polysol?
 - ix. What is difference between Iodometry and Iodimetry?
 - x. A good thickener possess _____ % tack index.
- (b) Describe the evaluation method of Acetic Acid. **04**
- Q.2** (a) Discuss the microscopic method for evaluation of starch. **07**
- (b) Explain, with principle, the method for evaluation of enzymatic desizing agent. **07**
- OR**
- (b) Describe a suitable method for determination of moisture content of a sizing softener. **07**
- Q.3** (a) Describe a method which is widely used for evaluation of wetting agents. **07**
- (b) Explain the significance of determination of copper number. Discuss the principle involved; show the chemical reactions taking place and the reagents used. **07**
- OR**
- Q.3** (a) Describe the Nippon-Kayaku method for evaluation of leveling agent. **07**
- (b) Describe the testing methods to evaluate carrier and resist salt. **07**
- Q.4** (a) Discuss the methods to evaluate cationic dye fixing agent. **07**
- (b) Give the methods for evaluation of NaOH and NaOCL. **07**
- OR**
- Q.4** (a) Describe the reflectance method for determination of strength of dyes. **07**
- (b) Give the test methods for ash content and viscosity of printing thickeners. **07**
- Q.5** (a) With principle, describe the method for quantitative evaluation of Sodium Alginate. **07**
- (b) Discuss the principle and procedure for determination of nitrogen content. **07**
- OR**
- Q.5** (a) Explain the analysis of silicone and polyethylene emulsions. **07**
- (b) Why formaldehyde content is to be determined? Describe elaborately the method for its determination. **07**
