

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2016****Subject Code:2162802****Date:09/05/2016****Subject Name: Analytical Textile Chemistry -II****Time: 10:30 AM to 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) Describe the process of microscopic identification of starch with necessary sketch, **07**
 (b) Give the test methods for determining Saponification value and iodine value of mutton tallow. **07**
- Q.2** (a) Describe performance test and liquefaction method for analysis of an enzymatic desizing agent. **07**
 (b) Give the method for determination of degree of hydrolysis of PVA. **07**
- OR**
- (b) Give the test method for detection of PVA on sized fabric. Also give the method to test for its adhesive power. **07**
- Q.3** (a) Give the test methods for quantitative estimation of anionic and cationic surfactants. **08**
 (b) Describe any one method for colorimetric analysis of nonionic surfactant. **06**
- OR**
- Q.3** (a) Discuss Drave's test for determination of wetting power of surfactant. **07**
 (b) In brief, discuss all the important aspects of determination of Copper number. **07**
- Q.4** (a) Give the test method for determining carboxyl content of treated cellulose with principle involved, chemical reactions and significance. **07**
 (b) i) Describe the test method for quantitative determination of Sodium alginate. **05**
 ii) Give two tests for identification of sodium alginate, **02**
- OR**
- Q.4** (a) Describe, interfacial migration test for estimation of leveling agent. **06**
Q.4 (b) Give the test methods for estimation of
 i) Resist salt **04**
 ii) Dispersing agent **04**
- Q.5** (a) Give the test methods for estimation of i) Carrier and(ii) cationic dye fixing agent. **07**
 (b) Describe, transmission method for determination of purity of dyestuff. **07**
- OR**
- Q.5** (a) Give the test methods to test printing thinker for its
 i)RIMI, **03**
 ii)Tack index **03**
 iii) Ash content **02**
 (b) Describe the test method for determination of formaldehyde content of finished textiles with the significance, principle and chemical reactions involved. **06**