

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER – VI EXAMINATION – WINTER 2015

Subject Code:162804**Date:14/12/ 2015****Subject Name: Technology of Printing - I****Time:2:30pm to 5:00pm****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) Give the printing paste formulation of direct dye to print on cotton with process sequence involved. **07**
- (b) Enlist different printing ingredients. Discuss about any two (except oxidising & reducing agents) in detail with suitable examples. **07**
- Q.2** (a) Enlist various printing methods for cotton using solubilised vat dye. Discuss any one in detail with suitable recipe, ingredients and process sequence. **07**
- (b) Give the techno-chemical aspects behind the formation of Antidiazotates with the process involved. **07**
- OR**
- (b) State the primary difference between discharge and resist style of printing. Explain about resist style in detail with technical significance involved. **07**
- Q.3** (a) Depict the construction of Roller printing machine with neat sketch. **10**
- (b) Write a note on basic discharge on direct ground on cotton. **04**
- OR**
- Q.3** (a) Describe about various flow behavior involved with printing thickeners. **10**
- (b) Give detailed classification of printing thickeners. **04**
- Q.4** (a) State the suitable print paste formulation for white discharge on direct ground with sequence. **04**
- (b) Discuss possible combinations to print vat dye on cotton fabric by direct style of printing. **10**
- OR**
- Q.4** (a) Explain the colloresin process of printing vat dyes on cotton with technical significance and various fixation methods. **07**
- (b) Give the printing recipe and sequence to develop mineral khaki colours on cotton textiles. **07**
- Q.5** (a) Elaborately discuss the printing of cotton fibre fabric with aniline black colours with suitable recipe, sequence and fixation methods. **10**
- (b) Differentiate between printing and dyeing from technical point of view. **04**
- OR**
- Q.5** (a) Elaborately discuss about any two printing thickeners. **07**
- (b) Discuss the role of oxidising & reducing agents in print paste with suitable example. **07**
