

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER – VI (NEW).EXAMINATION – WINTER 2016

Subject Code: 2162804**Date: 25/10/2016****Subject Name: Technology of Printing - I****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)** Answer the following OBJECTIVE questions: **07**
- i.** Name types of chemical resist style.
 - ii.** Give two examples of low substantivity naphthols.
 - iii.** Name any two alkali coagulable materials.
 - iv.** Give one recipe for oxidation of vat print.
 - v.** State the need to add aniline oil in direct style printing of aniline black colour.
 - vi.** Name any two acid liberating agents used in solubilised vat dye printing.
 - vii.** Antidiazotate + Naphtholate = _____.
- (b)** Name different methods to print solubilised vat dye on cotton textile by direct style. Discuss any one steaming method in depth. **07**
- Q.2 (a)** Note the technology involved in printing rapidogen colours with numerous fixation techniques in detail. **07**
- (b)** Give various approaches to print aniline black colour by direct style of printing. **07**
- OR**
- (b)** Write a detailed note on guar gum to be used as printing thickener. **07**
- Q.3 (a)** Elucidate the procedure to print direct dye by colour discharge style with at least two illuminant colours. **07**
- (b)** Explain the technical aspects of Leucotrope W and Leucotrope O with their chemical formula and application. **07**
- OR**
- Q.3 (a)** Discuss the technological aspects for colloresin process for application of vat dyes in printing. **10**
- (b)** Discuss the function and application of AQ paste in printing. **04**
- Q.4 (a)** Discuss in detail about naphthol padding method of printing. **07**
- (b)** Describe about block printing method with involved technical aspects. **07**
- OR**
- Q.4 (a)** Enlist and briefly explain about various requirements for selection of thickeners in print paste formulation. **10**
- (b)** Write a short note on style applicable for dyes requiring mordenting. **04**
- Q.5 (a)** Introduce steaming. Describe the construction and working of festoon steamer with neat sketch. **07**
- (b)** Give the techno-chemical aspects behind the formation of Antidiazotates with the process involved. **07**
- OR**
- Q.5 (a)** Explain the technical aspects of reducing and oxidizing agents in print paste with proper illustrations. **07**
- (b)** Discuss printing of HE reactive dyes by direct style. **07**
