



**SF-8363**

**B. E. III (Sem. VI) (Textile Processing) Examination**  
**May / June – 2011**  
**Technology of Printing - I**  
*(New Course)*

Time : 3 Hours]

[Total Marks : 100

**Instructions :**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="checkbox"/> B. E. 4 (Sem. 7) (Textile Processing)	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="checkbox"/> Technology of Printing - 1 (New)	<input type="text"/>
Subject Code No. : <input type="text"/> 8 <input type="text"/> 3 <input type="text"/> 6 <input type="text"/> 3	<input type="text"/>
Section No. (1, 2,.....) : <input type="text"/> 1&2	<input type="text"/>
	Student's Signature

- (2) Answers to the two sections must be written in same answer books.  
(3) Figures to the right indicate full marks.

**SECTION - I**

- 1 (a) Answer the following objective questions : 10
- Enumerate different ingredients of printing paste.
  - Which dye is selected as illuminant for discharge printing ?
  - What is Rongolite-C chemically ?
  - Naphthol AS is a low substantive naphthol. true or false. Justify.
  - Why TRO is used in naphthol printing ?
  - Write the full form of BASF.
  - Which discharging agents are used for vat colour ground ?
  - Citric acid is used as a resisting agent for reactive dyes. True or false, justify.
  - Rapid fast powders are more stable than ripidogen. True or false, justify.
  - Give examples of acid liberating agents.
- (b) Explain printing of cellulose with soluble azoic colours. 10
- 2 (a) Show stages of oxidation of aniline to aniline black. 10
- (b) Explain chlorite method of printing Solubilised Vat dyes. 5

**OR**

**SF-8363]**

**1**

**[Contd...**

- 2 Describe printing of cellulose using procion dyes. 15
- 3 Write short notes on any **three** of the following : 15
- Leucotrope - O and W
  - Naphthol-nitrite padding method
  - Direct discharge on direct ground
  - Over printed resist on Solubilised VAT ground

### SECTION - II

- 4 (a) Answer the following objective questions : 10
- Starch is composed of \_\_\_\_\_% amylose and \_\_\_\_\_% amylopectrin.
  - Give examples of synthetic thickeners.
  - Borax forms gel with guar gum which can be used for printing. True or False.
  - Commercial CMC generally have a DS of \_\_\_\_\_.
  - \_\_\_\_\_ is an indirect method of printing.
  - Indalca AG is available as a lemon yellow powder. True or False, Justify.
  - Define : Gelatinization temperature.
  - What is the effect of acetic acid on viscosity of CMC ?
  - What is the difference between starch and cellulose ?
  - What is the function of mild oxidizing agent ?
- (b) Give structure, cross section and gelatinization temperature of different starches. 10
- 5 (a) Draw the structure of guar gum and explain modified guar gum. 10
- (b) Classify the styles of printing and explain Direct style. 5

**OR**

- 5 Draw the neat diagram of Roller printing and explain construction and working of different parts. 15
- 6 Write short notes on any three of the following : 15
- Relation between high and low solid thickner.
  - Burn out style
  - Oxidizing and reducing agents
  - Locust bean gum