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RM-7181

B. E. - III (Sem. VI) (Textile Processing) Examination

May / June – 2010

Technology of Printing - I

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.

Name of the Examination :

☛ **B. E. - 3 (Sem. 6) (Textile Processing)**

Name of the Subject :

☛ **Technology of Printing - 1**

☛ Subject Code No. : **7 1 8 1** ☛ Section No. (1, 2,.....) : **1&2**

Seat No. :

Student's Signature

(2) Answers to the two sections must the written in separate answer books.

(3) Figures to the right indicate full marks.

(4) Tie two sections separately.

SECTION - I

1 (a) Answer the following objective questions : **10**

(i) Ennumerate different ingredients of priting paste.

(ii) Which dye is selected as illuminant for dischange printing ?

(iii) What is Rongolite-C chemically ?

(iv) Napthol AS is a low substantive napthol. True or false. Justify.

(v) Why TRO is used in napthol printing ?

(vi) Write the full from of BASF.

(vii) Which discharging agents are used for vat colour ground ?

(viii) Citric acid is used as a resisting agent for reactive dyes. True or false, justify.

(ix) Rapidfast powders are more stable than rapidogen. True or false, justify.

(x) 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 solublised vat dyes. **5**

OR

2 Describe printing of cellulose using procion dyes. **15**

3 Write short notes on any three of the following : **15**

(a) Leucotrope - O ans W

(b) Napthol-nitrite padding method

(c) Direct discharge on direct ground

(d) Over printed resist on solublised vat ground.

SECTION - II

4 (a) Answer the following objective questions : **10**

(i) Starch is composed of _____ % amylose and _____ % amylopactrin.

(ii) Give examples of synthetic thickeners.

(iii) Borax forms gel with guar gum which can be used for printing. True or false.

(iv) Commercially CMC generally have a DS of _____.

(v) _____ is a indirect method of printing.

(vi) Indalca AG is available as a lemon yellow powder. True of false, Justify.

(vii) Define : Gelatinization temperature.

(viii) What is the effect of acetic acid on viscosity of CMC ?

(ix) What is difference between starch and cellulose ?

(x) 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**

(a) Relation between high and low solid thickener

(b) Burn out style

(c) Oxidizing and reducing agents

(d) Locust bean gum.
