



SE-6885

B. E. III (Sem. V) Examination

April / May – 2011

Scouring & Bleaching - II

(Textile Processing) (Old Course)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कपवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :
B. E. III (Sem. V)

Name of the Subject :
Scouring & Bleaching - II

Subject Code No. : 6 8 8 5 Section No. (1, 2,.....) : 1&2

Seat No. :

Student's Signature

- (2) Answers to the **two** sections must be written in same answer book.
(3) Figure to the **right** indicates marks.

SECTION-I

- 1 (a) Answer the following objective questions. **10**
- (i) What is the effect of caustic reduction on denier ?
(ii) The luster of mercerized fabric is attributed to _____ reflectance of light.
(iii) What is the pH range for bleaching of Nylon with PAA?
(iv) What is the surface tension of mercerizing liquor ?
(v) What is degumming of silk ?
(vi) Wool is never bleached with sodium hypochlorite- True or False.
(vii) A treatment given for stress relaxation of wool is known as _____.
(viii) The high degree of twist produce high amount of luster. True or False. Justify.
(ix) What are the drawbacks of Polyester ?
(x) _____ problem often arises during wet processing of wool.
- (b) Explain various factors which affect the luster of **10** mercerized cotton.

- 2 (a) Explain the aminolysis of polyester in contest to mechanism, reactivity of amines and the location of attack. 10
- (b) Describe the Peroxide bleaching of wool. 5

OR

- 2 Discuss in detail the theory of mercerization. 15
- 3 Write short notes on any **three** of the following. 15
- (a) Mechanism of caustic reduction of polyester.
- (b) Hot mercerization.
- (c) Silk degumming.
- (d) Recuperator.

SECTION : II

- 4 (a) Answer the following objective questions. 10
- (i) The caustic concentration in recuperator is about _____.
- (ii) Define caustic reduction.
- (iii) Mercerization is based on the _____ action of concentrated aqueous solution of alkali.
- (iv) Name the various impurities present in raw wool.
- (v) Name the chemical test used for evaluation of the degree of mercerization.
- (vi) Give one example of non-cresylic wetting agent.
- (vii) Define semi mercerization.
- (viii) Give one name of catalyst used in caustic reduction of polyester.
- (ix) Name at least two fabric mercerizing machines.
- (x) The concentration of mercerizing caustic is normally measured in _____.
- (b) Describe various methods of scouring of loose wool. 10
- 5 Discuss various parameters that influence the weight reduction of polyester. 15

OR

- 5 Discuss yarn mercerization in detail. 15
- 6 Write short notes on any **three** of the following : 15
- (i) Mercerizing wetting agents.
- (ii) Nylon bleaching.
- (iii) Slack mercerization.
- (iv) Plasma technology.