

(4)

3. Describe the operation of kier in detail with a neat diagram. 20

Unit-III

4. Discuss various methods of bleaching of cotton and synthetic materials. 20
5. Describe any two machines used for mercerisation. 20

Unit-IV

6. Write a detailed essay on reactive dyes. 20
7. Discuss the features and dyeing method in winch dyeing machine with a neat sketch. 20

Unit-V

8. Write down a descriptive essay on milling operation used for woollens. 20
9. Make a detailed review of various wet processes used for silk. 20

Roll No.

Printed Pages : 4

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BT-3/D-13

TEXTILE CHEMICAL PROCESSING-I

Paper-TT-209-A Opt.-I

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt one question from each unit.

Unit-I

1. (a) The step following desizing is :
(i) Bleaching (ii) Scouring
(iii) Singeing (iv) Mercerisation
- (b) Kitties are removed in processing in :
(i) Desizing (ii) Singeing
(iii) Grey checking (iv) Bleaching
- (c) Singeing of cotton fabrics results in :
(i) Improved strength
(ii) Decreased crease recovery
(iii) Increased bending rigidity
(iv) Improved performance during printing
- (d) Which of the following is most difficult to remove in desizing :
(i) Starch (ii) Wax
(iii) Impurities (iv) Fatty materials
- (e) NaOH mainly acts as :
(i) Bleaching agent (ii) Scouring agent
(iii) Desizing agent (iv) Mercerizing agent

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[Turn over

(2)

- (f) The active bleaching agent in sodium hypochlorite solution is :
- (i) OCl^- (ii) Cl_2
(iii) O^- (iv) Cl^-
- (g) Which of the following equipment is suitable for continuous bleaching of cotton :
- (i) Kier (ii) J-box
(iii) Pad roll machine (iv) Jumbo jigger
- (h) Damage to cotton due to bleaching cannot be estimated by :
- (i) Methylene blue absorption
(ii) Barium Number
(iii) Cuprammonium fluidity
(iv) Tensile strength
- (i) Which of the following mercerizing machines imparts maximum ensure to cotton fabrics on mercerisation :
- (i) Pad-chain (ii) Pad-chainless
(iii) Padless-chainless (iv) None of above
- (j) Thermodynamically dyeing is :
- (i) Endothermic
(ii) Exothermic
(iii) Athermic
(iv) Exothermic in the beginning and turns endothermic after sometime
- (k) Direct dyes under the conditions of dyeing are :
- (i) Anionic (ii) Cationic
(iii) Non-Ionic (iv) Amphoteric

(3)

- (l) Wool is dyed at a temperature of :
- (i) 50-60°C (ii) 80-90°C
(iii) 100-110°C (iv) 120-130°C
- (m) Jet-dyeing machine is based on principle of :
- (i) Dye liquor stationary - fabric moving
(ii) Dye liquor moving-fabric stationary.
(iii) Both dye liquor and fabric moving
(iv) Both dye liquor and fabric stationary
- (n) During carbonization of wool, the impurities removed are :
- (i) Vegetable Matters
(ii) Fatty matters
(iii) Sulphonic acid groups
(iv) Carboxylic acid groups
- (o) Degumming of silt is mainly done to :
- (i) Add fibroin (ii) Remove fibroin
(iii) Add sericin (iv) Remove sericin
- (p) Name the most popular singeing method.
- (q) List out naural Impurities of cotton.
- (r) Give objective of heat setting of polyester.
- (s) Which colors are known as Ice colors ?
- (t) Name the processes carried out on padding mangle.

1×20=20

Unit-II

2. Discuss various methods of desizing of grey cotton fabric.