

[Total No. of Questions - 5] [Total No. of Printed Pages - 3]
(2125)

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B. Tech 5th Semester Examination
Textile Chemical Processing-I (NS)

TE-312

Time : 3 Hours

Max. Marks : 100

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt All questions from each sections A, B, C and D.
Section E is compulsory.

SECTION - A

1. (a) Discuss the process sequence for processing of 65/35 polyester/cotton blended fabric. (15)
- (b) Explain discharge printing on cotton. (5)

OR

- (a) Write the pretreatments before dyeing for 60/40 polyester/wool blended fabric. (15)
- (b) Discuss the defects of ginging. (5)

SECTION - B

2. (a) Discuss the chemical properties of natural and synthetic starch. (15)
- (b) Give the classification of enzymes. (5)

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OR

- (a) Write the classical reaction to saponify the oils and fats and wax removal. (10)
- (b) Discuss the safety measures in scouring of fibre dyed suitings. (10)

SECTION - C

3. How pH change takes place in sodium hypochlorite bleaching and suits remedial measures. Mention the chemical reactions. (20)

OR

- (a) Discuss the hydrogen peroxide bleaching of cotton and its relation with pH. (10)
- (b) Write the choice of bleaching agents with its parameters for wool fibre. (10)

SECTION - D

4. (a) Discuss the relation between heat setting temp. and dye uptake % in polyester dyeing. (15)
- (b) Write the test to measure the degree of heat setting. (5)

OR

- (a) Define the L,a,b values and its application in color matching. (10)
- (b) Discuss the principle of color spectrophotometer. (10)

[P.T.O.]

SECTION - E

5. (a) Why sodium silicate is uses in H_2O_2 bleaching?
- (b) $NaBrO_2$ is used as _____.
- (c) Knitted fabrics are dried on which m/c?
- (d) Which activators are used in $NaClO_2$ bleaching?
- (e) How we dissolve wool fibre?
- (f) Fibre dyed fabric heat setting is done at _____.
- (g) In mercerization which properties change _____.
- (h) Whiteness index is used for _____.
- (i) Explain Barium activity number _____.
- (j) Cloud point is used for _____ surfactant.
- (2×10=20)