

xv) Which properties are evaluated in the fresh water?

### SECTION-C

**Note:** Long answer type questions. Attempt any three questions. 3x10=30

Q.3 What do you mean by fastness testing? Discuss the standard method of wash fastness testing with sample & instrument details and evaluation method.

Q.4 Discuss the detailed procedure for analysis of following blends :

- i) Polyester / Viscose
- ii) Nylon / wool
- iii) Acrylic / wool

Q.5 Write short note on the following :

- i) Hardness testing of water.
- ii) Effluent treatment plant.

Q.6 Write short note on the following :

- i) Cuprammonium fluidity test
- ii) Barium activity number

Q.7 Discuss the mechanical & chemical degradation of cotton and wool in detail.

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### 5th Sem. / Textile Processing

### Subject : Textile Chemical Testing

Time : 3 Hrs.

M.M. : 100

### SECTION-A

**Note:** Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1
- a) Define copper number.
  - b) Reactive dyes have \_\_\_\_\_ wash fastness(good/poor)
  - c) Rubbing fastness is also known as \_\_\_\_\_.
  - d) Polyester dissolves in which solvent?
  - e) Discuss the burning test of cotton fibre.
  - f) What do you mean by term fastness in context to dyed material?
  - g) Name the two types of the gray scale.
  - h) Which equipment used for the light fastness testing?
  - i) What does high carboxyl group content in cotton fabric indicate?

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- j) What kind of damage takes place in polyester?
- k) What do you mean by COD?
- l) Viscose dissolve in \_\_\_\_\_ %  $H_2SO_4$ .
- m) Which equipment used for the rubbing fastness testing?
- n) How the scouring efficiency is judged in cotton?
- o) Comment on the overall fastness properties of the vat dyed cotton.
- p) How much % of fatty & waxy material is there in cotton?
- q) Rating of light fastness is given from \_\_\_\_\_ to \_\_\_\_\_.
- r) Which equipment used for the wash fastness testing?

### SECTION-B

**Note:** Short answer type questions. Attempt any ten parts 10x4=40

- Q.2
- i) How the P/C blend is analyzed?
  - ii) Discuss in detail the procedure of testing sublimation fastness.

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- iii) Discuss the possible mechanical damage in cotton and wool.
- iv) What is gray scale and what is its use?
- v) Briefly discuss the procedure to test the sea water fastness.
- vi) What is barium activity number and why it is determined?
- vii) Discuss the detail of instrument used for rubbing fastness.
- viii) Discuss the characteristics of effluent generated from processing.
- ix) Explain the method of evaluating hydrogen peroxide.
- x) Explain the concept of methylene blue absorption test.
- xi) How will you determine the fat and wax content of cotton textile?
- xii) How the print paste is evaluated?
- xiii) What do you mean by fastness of dyed material and enlist different fastness to be tested?
- xiv) Write the detail procedure to measure sublimation fastness.

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