

xv) Discuss a test method for chlorination fastness of a fabric.

### SECTION-C

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

- Q.3 Discuss straightened fibre method of twist determination.
- Q.4 Explain the objectives of testing with examples.
- Q.5 Describe single yarn count measurement by wrap reel & knowles balance & double yarn count by Beesley's balance.
- Q.6 Explain a method of determination of the blend composition of a polyester/cotton yarn.
- Q.7 Discuss the testing of rubbing (dry) fastness and perspiration fastness of cotton fabric.

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### 5th Sem. / Textile Design

#### Subject : Testing & Quality Control-I

Time : 3 Hrs.

M.M. : 100

### SECTION-A

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

- Q.1 a) What is a quality control chart?
- b) What do you mean by a biased sample?
- c) Convert 40<sup>s</sup> cotton count to denier & 380 tex to denier.
- d) Define yarn twist.
- e) Name three quality control organisations.
- f) What is a range chart?
- g) What is the relation between twist per unit length and yarn diameter?
- h) Draw the longitudinal & cross-sectional view of wool & polyester fibres.
- i) What is 'cop end effect'?
- j) Name the solvents for polyester, nylon &

cotton fibres.

- k) What type of smell comes from burning viscose, Wool & polyester fibres.
- l) What do you mean by 'tested quality' scheme?
- m) What is twist factor?
- n) Mention two precautions to be taken while measuring twist in a yarn.
- o) What is a blue scale?
- p) Define perspiration fastness.
- q) What do you mean by rubbing fastness?
- r) What are the different types of microscopes available?

### SECTION-B

**Note:** Short answer type questions. Attempt any ten parts

10x4=40

- Q.2
- i) What is 'squaring' technique of fibre sampling?
  - ii) What are the advantages of using quality control charts?
  - iii) Define cotton count, worsted count,

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woollen count, tex & denier.

- iv) Write note on relation between yarn twist & yarn strength.
- v) How testing is essential for process control?
- vi) What is dye sampling method for wool fibre?
- vii) Give the relationship between tex & english cotton count, denier & metric count, worsted count & woollen count.
- viii) What is the importance of direction of twist in a yarn?
- ix) What is the need for fixing standards for tests?
- x) Discuss a method of quality control.
- xi) Mention a method for fabric sampling for crease recovery test.
- xii) How dry cleaning fastness can be tested for a dyed cotton fabric?
- xiii) Give some effect of yarn twist on fabrics properties.
- xiv) Mention a scheme of test for burning of wool fibre.

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