

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain the working principle of baer sorter. Describe the procedure to analyse baer sorter diagram to measure mean length, effective length and short fiber percentage.

Q.24 Define sampling. Why do we need sampling?
Describe different types of sampling.

Q.25 Define yarn twist. Why do we twist? Explain any one method to determine yarn twist.

4th Sem./ Textile Design

Subject : Testing & Quality Control - I

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Standard Moisture regain of cotton fiber is

- a) 11% b) 8.5%
- c) 13% d) 4%

Q.2 The ratio of actual vapor pressure and saturated vapor pressure expressed as a percentage is known as

- a) Humidity b) Absolute humidity
c) Relative humidity d) None

Q.3 The following is not a Direct yarn numbering system

- a) Tex b) English count
c) Denier d) None

- Q.4 Baer sorter is equipment used to measure
- a) Fiber fineness b) Fiber Length
c) Fiber maturity d) None
- Q.5 The spiral turns on the surface of yarn is known as
- a) Micronaire b) Twist
c) Tex d) None
- Q.6 Wet and dry bulb hygrometer is use to measure
- a) Fineness b) Maturity
c) RH d) None

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Define quality control
- Q.8 Define the need of sampling
- Q.9 Convert 80 Ne into Tex
- Q.10 Define random sample
- Q.11 Define moisture content
- Q.12 Tell the use of Sheffield micronaire

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SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Explain the influence of humidity on fiber properties
- Q.14 Calculate the moisture regain and moisture content if a 100gms of wet cotton yarn when its oven dry weight is found to be 94.5 gms.
- Q.15 Find the weight of 270 yds of 60^{rs} cotton yarn.
- Q.16 If tex of a given yarn is 15 calculate its value in Denier and English count
- Q.17 Describe the working principle of trash analyser.
- Q.18 Define mean length and effective length of fiber.
- Q.19 Describe the importance of fiber length in brief.
- Q.20 Discuss the aim and scope of quality control.
- Q.21 Calculate the Twist per Inch of 36^s English count yarn, if Tm is 2.5.
- Q.22 Define fiber maturity. Write the importance of fiber maturity.

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