

- Q.28 Define fiber fineness and explain briefly the importance of fiber fineness.
  - Q.29 Define fiber maturity and give the importance of fiber maturity.
  - Q.30 Define twist. Explain different types of twist with diagram.
  - Q.31 Convert 50 English count into Tex and Denier.
  - Q.32 Explain any one method in brief to determine the fiber maturity.
  - Q.33 Write the procedure to determine count of yarn with the help of Beesley balance.
  - Q.34 Write the function of twist in yarn structures in brief.
  - Q.35 Explain the need of sampling and different types of sampling.

## **SECTION-D**

**Note:** Long Answer type question. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain briefly the analysis of sorter diagram to find out effective length, mean length and percentage short fibers.

Q.37 Explain the working of a twist tester with the help of well illustrated diagram.

Q.38 Explain the working principle of a micronaire with the help of a neat and clean diagram.

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4th Sem / Textile Design  
Subject : Testing & Quality control-I

**Time : 3 Hrs.**

M.M. : 100

## **SECTION-A**

Note: Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 The number of turns per inch in yarn is known as  
a) TPM b) TPI  
c) TPC d) None

Q.2 When the yarns are doubled in more than two stages it is known as  
a) Plied yarn b) Cable yarn  
c) Spiral yarn d) None

Q.3 \_\_\_\_\_ = TPI Ø count  
a) Tex b) Denier  
c) Twist multiplier d) None

Q.4 \_\_\_\_\_ x Ne = 590.5  
a) Denier b) Metric count  
c) Wollen count d) Tex

Q.5 The number of spiral turns given to a yarn is known as  
a) Spindle b) Rotor  
c) Twist d) None

- Q.6 \_\_\_\_\_ method is used to measure cotton maturity  
 a) Trash analyser  
 b) Hygrometer  
 c) Caustic soda swelling  
 d) None
- Q.7 In \_\_\_\_\_ sample selection of items depends upon by chance only  
 a) Random                  b) Biased  
 c) Quota                  d) None
- Q.8 Wrap reel is used to measure \_\_\_\_\_.  
 a) Yarn strength            b) Yarn twist  
 c) Yarn count              d) None
- Q.9 Fibers free from trash obtained in trash analyzer is known as  
 a) Lint                    b) Trash  
 c) Invisible loss         d) None
- Q.10 Baer sorter is used for measuring \_\_\_\_\_.  
 a) Fineness of yarn  
 b) Length of fiber  
 c) Moisture regain of fiber  
 d) None

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Define mean length.  
 Q.12 Define moisture regain.

- Q.13 Define Z-twist.  
 Q.14 Define English count.  
 Q.15 Define short fiber percentage.  
 Q.16 Write the standard regain of polyester.  
 Q.17 The strength of cotton fibers increases with increase in humidity . (True/False)  
 Q.18 Shirley Moisture hygrometer is used to find out \_\_\_\_\_.  
 Q.19 Define relative humidity.  
 Q.20 Define effective length.

### SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 What are the precautions taken during fabric sampling?  
 Q.22 Give the formula to calculate resultant count.  
 Q.23 Describe fiber maturity and the method used to measure fiber maturity?  
 Q.24 Describe effective length, percentage short fibers and mean length of fibers.  
 Q.25 If a skein of 100 meter of polyester yarn weight 0.84 grams, determine its denier.  
 Q.26 Write in brief the influence of humidity on fiber properties and processing.  
 Q.27 What do you mean by standard regain. Write standard regain of cotton. Silk, wool, Terylene and viscose fibers?

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