Q.24 Describe the function of twist in yarn structure. Define balanced twist. Explain the use of twist multiplier.

Q.25 Explain yarn numbering system in brief giving example of each. Explain merits and demerits of each type of yarn numbering system.

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 Polyester fiber is
a) 16 %   b) 8.5 %
c) 11 %   d) 0.4 %

Q.2 The amount of vapours present in the atmosphere is known as
a) Humidity   b) Absolute humidity
c) Relative humidity   d) None

Q.3 The following is not a Indirect yarn numbering system.
a) Tex   b) English count
c) Metric count   d) None

Q.4 Sheffield Micronaire is an equipment is use to measure
a) Fiber Fineness   b) Fiber Length
c) Fiber maturity   d) None

Q.5   Wet and dry bulb hygrometer is use to measure

a)   Fineness   b)   Maturity

c)   RH   d)   None

Q.6   The spiral turns on the surface of yarn is known as

a)   Micronaire   b)   Twist

c)   Tex   d)   None

SECTION-B

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

Q.7   Tell the use of baer sorter.

Q.8   Define moisture regain

Q.9   Define biased sample.

Q.10   Concert 10 Tex into English count

Q.11   Define sampling

Q.12   Define Moisture regain.

SECTION-C

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

Q.13   Describe the working principle of Sheffield micronaire.

Q.14   Describe the importance of fiber length in brief

Q.15   Find the TM of cotton yarn of 25 English count, if its Twist per Inch is 13

Q.16   Give the reasons for textile testing.

Q.17   Find the weight of 240 yds of 40^{s} cotton yarn.

Q.18   If denier of a given yarn is 10, calculate its value in tex and English count.

Q.19   Discuss the aim and scope of quality control

Q.20   Calculate the moisture regain and moisture content if a 105 gms of wet cotton yarn when its over dry weight is found to be 100 gms.

Q.21   Define mean length and effective length of fiber

Q.22   Explain the influence of humidity on fiber properties.

SECTION-D

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

Q.23   Describe the importance of fiber fineness. How will you measure fiber fineness, Explain with the help of suitable diagram.