

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2018

TEXTILE TESTING AND QUALITY ASSURANCE

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. Define Textile testing.
2. State the term biased sampling.
3. Mention the term yield point.
4. State the importance of yarn evenness.
5. What do you understand by bursting strength of the fabric ?

(5×2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Write short note on measures of central tendency.
2. Define standard regain and list standard regain of any three textile fibres.
3. Summarise the features of Advanced Fibre Information System (AFIS).
4. Explain the determination of maturity of cotton by caustic soda swelling method.
5. Outline the various periodic variations in yarn.
6. State the importance of twist and define twist.
7. List the various fabric properties and characteristics.

(5×6 = 30)

PART — C
(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

- III (a) State the meaning of population and individual in statistics. 3
(b) Sketch and explain the estimation of Regain of cotton by Conditioning oven. 12

OR

- IV (a) Calculate the standard regain of 67/33-PC blend. 3
(b) Illustrate 3 types of graphical representation of data and any 4 types of frequency curve. 12

UNIT — II

- V (a) State the use of Digital fibro-graph and mention the parameters obtained. 3
(b) Describe the estimation of trash in cotton by suitable equipment with sketch. 12

OR

- VI (a) Interpret the term FQI 3
(b) Explain the determination of fibre fineness by ATIRA fibre fineness tester with diagram. 12

UNIT — III

- VII (a) Define yarn hairiness. 3
(b) Sketch and Describe the working of single yarn strength tester with CRT principle. 12

OR

- VIII (a) State the importance of yarn count. 3
(b) Explain the estimation of single yarn twist by tension type twist tester with sketch. 12

UNIT — IV

- IX (a) Find the cover factor of the cotton fabric with warp count X weft count – $40^s \times 36^s$ EPI \times PPI – 72×64 . 3
(b) Sketch and explain the determination of crease recovery by Shirley crease recovery tester. 12

OR

- X (a) Define crimp and crimp amplitude. 3
(b) Explain the working of fabric thickness tester with diagram. 12