Time : 3 Hours   **Max. Marks : 80**

VI SEMESTER   6.4 PRINCIPLES OF TEXTILE TESTING-II

Part – A

2 x10 = 20 Marks

1. What is yield point in tensile properties of textiles?
2. How do define 'breaking length of a textile material?
3. What are specifications of a lea for strength test.
4. What are the instruments used to find out CSP value?
5. Give two specific examples where bursting strength test is done.
6. Differentiate between single thread and lea strength test results.
7. Give the most significant reason for fabric shrinkage.
8. How do you express fabric 'Handle'?
9. What is the significance of TQM?
10. What is the fabric defects removed in singeing?

PART-B

12 x 5= 60 Marks

11. A) Describe the CRT principle of tensile strength testing instruments. **(4)**

    B) Elaborate the three different approaches of strength testing – tensile, tearing & bursting. **(8)**

(OR)

    C) What are elastic recovery and its importance in tensile properties of textiles? **(4)**

    D) Explain how specimen length is an influencing factor in strength testing results? **(8)**

12. A) Give pros and cons of single thread and lea strength test of yarns. **(4)**

    B) Explain the principle and working of pendulum lever type strength testing instrument. **(8)**

(OR)

    C) Distinguish the results obtained from ballistic and tensile strength testing machines. **(4)**

    D) Describe the working of inclined plane tester with sketch. **(8)**

P T O

3	A)	Give the specification and method of preparing sample for strip strength test.	(4)
	B)	Describe the working of bursting strength tester with neat sketch.	(8)

(OR)

	C)	What are various types of abrasions?	(4)
	D)	D) Describe the working of Martindale abrasion tester.	(8)

14	A)	Define the terms – bending length & flexural rigidity.	(4)
	B)	Explain the process of determining creasing property of a fabric.	(8)

(OR)

	C)	What do you understand with 'drape co-efficient'?	(4)
	D)	Describe measurement of crimp percentage by using Shirley crimp tester.	(8)

15	A)	Enlist various kinds of fabric defects and system to identify them.	(4)
	B)	What is Acceptance Quality Level (AQL) and its usefulness in textile industry?	(8)

(OR)

	C)	What are 'quality policy' and its benefit in textile manufacture?	(4)
	D)	What are various objectives of fabric inspection during quality assurance?	(8)

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INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY
BARGARH/GUWAHATI/FULIA/JODHPUR/SALEM/VARANASI/CHAMPA/KANNNUR/ KHTI GADAG/SPKM VENKATAGIRI
DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY
SEMESTER EXAMINATION - NOV/DEC-2017

(2014 REGULATION)

Semester: VI Semester

Subject Code & Name: 6.4 Principles of Textile Testing-II

Time: 3 Hours

Max.marks:80

PART-A

Answer all the questions within two to three sentences.

(2 x 10) =20 Marks

1. Why tensile testing of textile materials is required?
2. Define Breaking Length & Breaking Extension.
3. Write the principle on which the lea strength tester works.
4. What is CSP?
5. What are the different strength tests carried out for fabric?
6. What causes to pilling on the fabrics.
7. Explain Crimp of the yarn.
8. Differentiate crease recovery & crease resistance properties of the fabrics.
9. Write four defects of fabric which is observed very often.
10. What are the advantages of total quality management?

PART-B

Answer all the questions in detail.

(4+8) X 5 = 60 Marks

11. a) Explain Instantaneous and Time Dependent Effect in tensile loading.

    b) What are factors which affect the tensile testing result of fabric?

    (Or)

    c) Differentiate elongation and extension with definition & formula.

    d) Explain CRL, CRE and CRT condition of tensile testing machine.

12. a) Explain Pendulum Lever Principle.

    b) Explain working of single yarn strength tester with neat sketch.

    (Or)

    c) Define CSP and RKM.

    d) Discuss principle &working of Instron Tester with neat diagram.

13. a) What is method for preparing sample for strip test and grab test in tearing strength testing of fabrics?

b) Write working of Elmendorf Tearing Strength Tester with its neat sketch.

(Or)

c) Define abrasion, serviceability and pilling.

d) Explain ICI Pilling Box Tester with neat sketch.

14. a) Differentiate stiffness, handle and drape.

b) Discuss Drape Co-efficient and also explain working of Drape Meter with its neat diagram.

(Or)

c) Differentiate Bending Length, Flexural Rigidity and Bending Modulus.

d) Illustrate working of Shirley Crease Recovery Tester with its diagram.

15. a) Explain American 10 point system of Grading of fabric and compare it with 4 point system of Fabric grading.

b) Write the concept of total quality management and its positive outcome in textile units.

(Or)

c) Explain Quality Circle, Quality Plan, Quality Policy and Quality Assurance.

d) What are the different elements of six sigma and how it may be advantageous? in the field of textile?

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Year / Semester: VI

Time: 3 Hours

Subject: (6.4) PRINCIPLES OF TEXTILE TESTING-II

Max. Mark: 80

PART A

(Answer all questions within TWO or THREE sentences)

2x10 = 20

1. What is yield point in tensile properties of textiles?
2. How do you define 'breaking length of a textile material'?
3. What are specifications of a lea for strength test?
4. What are the instruments used to find out CSP value?
5. Give two specific examples where bursting strength test is done.
6. Differentiate between single thread and lea strength test is done.
7. Give the most significant reason for fabric shrinkage.
8. How do you express fabric 'Handle'?
9. What is the significance of TQM?
10. What is the fabric defects removed in singeing?

PART-B

(4+8)x5=60

11. (A) Describe the CRT principle of tensile strength instruments. — 4
    (B) Elaborate the three different approaches of strength testing – tensile, tearing & bursting. — 8

OR

    (C) What are elastic recovery and its importance in tensile properties of textiles? — 4
    (D) Explain how specimen length is an influencing factor in strength testing results? — 8

12. (A) Give pros and cons of single thread and lea strength test of yarns. — 4
    (B) Explain the principle and working of pendulum lever type strength testing instrument. — 8

OR

    (C) Distinguish the results obtained from ballistic and tensile strength testing machines. — 4
    (D) Describe the working of inclined plane tester with sketch — 8

13. (A) Give the specification and method of preparing sample for strip strength test. — 4
    (B) Describe the working of bursting strength tester with neat sketch. — 8

OR

    (C) What are various types of abrasions? — 4
    (D) Describe the working of Martindale abrasion tester. — 8

14. (A) Define the terms – bending length & flexural rigidity. — 4
    (B) Explain the process of determining creasing property of a fabric. — 8

OR

    (C) What do you understand with 'drape co-efficient'? — 4
    (D) Describe measurement of crimp percentage by using Shirley crimp tester. — 8

15. (A) Enlist various kinds of fabric defects and system to identify them. — 4
    (B) What is Acceptance Quality Level (AQL) and its usefulness in textile industry? — 8

OR

    (C) What are 'quality policy' and its benefit in textile manufacture? — 4
    (D) What are various objectives of fabric inspection during quality assurance? — 8

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BARGARH/GUWAHATI/FULIA/JODHPUR/SALEM/VARANASI/CHAMPA/KANNUR/KHTI-GADAG/SPKM IIHT VENKATAGIRI

DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY (Regulation – 2014)
SEMESTER (BACK PAPER) EXAMINATION-NOV./DEC.- 2018

Year / Semester: **VI Semester**   Time: 3 Hours

Subject Code & Name: **6.4 PRINCIPLES OF TEXTILE TESTING-II**   Max.Marks:80

PART-A   (2 X 10= 20 Marks)

Answers all the questions within two to three sentences.

1. What is the standard testing atmosphere?

2. What is the unit of tenacity?

3. What is the specimen length for lea strength testing?

4. What is CSP?

5. Name any two fabrics tested for bursting strength.

6. What are the different principles of tensile strength testing machines?

7. What is the formula for calculating shrinkage?

8. How do you express fabric handle?

9. What is the fabric defects removed in singeing?

10. Define TQM.

PART-B   (4+8) X 5= 60 Marks)

Answer all the questions in detail

11. a) Describe CRT principle of tensile strength instruments.   (4)

    b) Discuss the factors which affect the tensile testing test result of fabric.   (8)

(OR)

    c) Give the formula for calculating elastic recovery.   (4)

    d) Elaborate the three different approaches of strength testing tensile, tearing   (8)
       and bursting.

12. a) Write short notes on pendulum lever principle.   (4)

    b) Explain the working of single yarn strength tester with a neat sketch.   (8)

(OR)

    c) Define CSP and RKM value.   (4)

    d) Explain the working principle of lea strength tester with suitable sketch.   (8)

13. a) What is the specimen length for grab strength tester? **(4)**

b) Describe the working principles of bursting strength tester with a neat **(8)** sketch.

(OR)

c) Define the term of pilling. **(4)**

d) Explain the working procedure of ICI pilling box tester with a suitable **(8)** sketch

14. a) Define the term of bending length. **(4)**

b) Describe the working principle and measurement of crease recovery tester. **(8)**

(OR)

c) Give the formula for calculating drape co-efficient. **(4)**

d) Illustrate the measurement of crimp percentage by using Shirley crimp **(8)** tester.

15. a) Name any five fabric defects. **(4)**

b) Explain acceptance quality level (AQL) and its usefulness in textile **(8)** industry.

(OR)

c) Explain quality policy and quality assurance. **(4)**

d) Discuss in detail about the total quality management and its benefits in **(8)** textile industry.

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INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY

BARGAR/GUWAHATI/FULIA/JODHPUR/SALEM/VARANASI/CHAMPA/KANNUR/KHTIGADAG/SPKM IIHT- VENKATAGIRI

DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY

SEMESTER (REGULAR & BACK PAPER) EXAMINATION- April / May-2019
(Regulation- 2014)

Year / Semester: VI Semester   Time: 3 Hours

Subject Code & Name: 6.4 PRINCIPLES OF TEXTILE TESTING-II   Max.Marks:80

PART-A

Answers all the questions within two to three sentences.   (2 X 10= 20 Marks)

1.   Mention the standard testing atmosphere conditions.

2.   Define breaking length of a textile material?

3.   What is CSP?

4   What is the specimen length required for testing ballistic strength?

5.   What type of liquid is used in hydraulic bursting strength tester?

6.   Which strength test is required on knitted fabric?

7.   Give the formula for calculating shrinkage.

8.   What are the types of rubbing fastness?

9.   What is the fabric defects removed in singing?

10.   Define TQM.

PART-B

Answer all the questions in detail   (4 + 8) x 5 = 60

11. a) Describe CRE principle of tensile strength instruments.   (4)

     b) Discuss the factors which affect the tensile testing test result of fabric.   (8)

                                    (OR)

     c) What is the formula for calculating elastic recovery?   (4)

     d) Explain the method of tensile strength testing of fabric with line diagram.   (8)

12. a) Give pros and cons of single thread and lea strength test of yarns.   (4)

     b) Discuss the working principle of single yarn strength tester with a neat
         sketch.   (8)
                                    (OR)

     c) Explain the pendulum lever principle.   (4)

     d) Describe the working of ballistic strength tester with sketch.   (8)

13. a) What is the specimen length for grab strength tester? **(4)**

b) Explain the working principle of ICI pilling box tester with a neat sketch. **(8)**

(OR)

c) Define the term of pilling and its possible causes. **(4)**

d) Explain the working procedure of Elmendorf tearing strength tester with a neat sketch. **(8)**

14. a) Define the bending length. **(4)**

b) Explain the working of drape meter with its neat diagram. **(8)**

(OR)

c) Give the formula for calculating crimp percentage and mention the factors affect the crimp percentage of fabric. **(4)**

d) Illustrate the measurement and working of crease recovery tester. **(8)**

15. a) Name any four fabric defects and its causes. **(4)**

b) Explain Acceptance Quality Level (AQL) and its usefulness in textile industry' **(8)**

(OR)

c) Explain the term Quality control and Quality assurance. **(4)**

d) Discuss in detail about the total quality management and its benefits in textile industry. **(8)**

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INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY

DIPLOMA IN HANDLOOM AND TEXTILE TECHNIOLOGY

BARGAR/GUWAHATI/FULIA/JODHPUR/SALEM/VARANASI/CHAMPA/KANNUR/KHTIGADAG/SPKM IIHT/ VENKATAGIRI

SEMESTER EXAMINATION-NOV/DEC-2019

(Regulation-2014)

Year / Semester   :   SIXTH SEMESTER   Time: 3 Hour

Subject Code & Name   :   6.4 PRINCIPLES OF TEXTILE TESTING -II   Max.Marks: 80

PART-A

2×10=20

Answer all the questions within two to three sentences

1. Define the term "stress on a fiber"

2. What is "Elastic Recovery"

3. What is principle of pendulum lever type of tensile testing instrument?

4. What is CSP?

5. What are the two types of fabric preparation for fabric strength testing?

6. Bursting strength is measured for which kind of fabrics?

7. Write the formula to calculate the bending modulus of a fabric.

8. Write the formula for drape coefficient.

9. State the definition of the term " Quality Control"

10. What is AQL?

PART-B

(4+8) ×5=60

Answer all the questions in detail

11   A   Explain the term tenacity and breaking length of a textile material.   4

      B   Draw the typical load-elongation curve of a textile fiber and specify the yield point, tenacity at break, Extension at break and iritial young's modulus in the curve.   8

(OR)

      C   Write short notes on time dependent elastic recovery of a textile material.   4

      D   With suitable diagram, explain the mechanism of load application to the textile material under CRE, CRL and CRT principle.   8

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12 A Discuss the advantages and disadvantages of using strain gauge principle in tensile strength measurement.   4

    B Explain the method of measurement of yarn strength using inclined plane principle.   8

(OR)

    C Discuss the merits and demerits of single yarn strength test results.   4

    D Explain the principle of working of universal tensile strength testing instrument.   8

13 A What are the factors affecting the tear strength of fabrics?   4

    B With suitable line diagram, explain any one method of measurement of tensile strength of a fabric.   8

(OR)

    C Draw any four types of tearing strength test specimen.   4

    D With suitable line diagram, explain the method of measurement of abrasion resistance using Martindale abrasion tester.   8

14 A Describe the various factors influencing the drape property of a fabric.   4

    B Explain the principle of measurement of stiffness property of a fabric using Shirley stiffness tester.   8

(OR)

    C List the various fabric property that would be affected due to yarn crimp.   4

    D With line diagram, explain the rubbing fastness assessment process.   8

15 A Compare Quality Control and Quality Assurance   4

    B Explain Quality Management System (QMS) and List the advantages of implementing QMS in Textile Industry.   8

(OR)

    C Write short notes on Quality Policy.   4

    D Explain the concepts of Quality Circle, its functions and advantages.   8