

Scheme – I

Sample Question Paper

Programme Name : Diploma in Textile Technology

Programme Code : TC

Semester : Third

Course Title : Textile Testing

Max. Marks : 70

22364

Time: 3 Hrs.

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1) Attempt any FIVE of the following.

10 Marks

- a) Compare direct and indirect yarn numbering on the basis of linear density principle with example.
- b) Calculate CSP of cotton yarn have 2.24 grams lea weight and 60 lbs. lea strength.
- c) Calculate percentage weight loss of PC blend fabric of 1.2 grams which became 1.15 grams after 200 cycles on abrasion tester.
- d) Compare Waterproof and Water resistance fabric on the basis of finish applied, water and air relation of fabric.
- e) Define Tenacity of yarn with its expression.
- f) Write the sample size for fabric tensile strength measurement for cut-strip and raveled-strip method.
- g) Define Air permeability and Air resistance of fabric.

Q.2) Attempt any THREE of the following.

12 Marks

- a) Calculate the English yarn number of cotton yarn of length 2.24 km and weighing 33.04 grams.
- b) Explain fabric sampling method with relevant sketches.
- c) Describe four factors responsible for pilling of fabric with justification.
- d) Describe four factors affecting Air permeability of fabric with justification.

Q.3) Attempt any THREE of the following.

12 Marks

- a) Describe with neat labeled sketch the procedure to measure bursting strength of fabric.
- b) Describe with neat labeled sketch the procedure for measurement of fabric thickness.
- c) Calculate drape coefficient of sateen fabric tested on drape meter using following data,
Draped pattern paper weight – 2.5grams,
Ammonia paper weight – 0.012 gram per sq. cm,

Sample size 10" diameter and supporting disk of 5" diameter.

- d) Describe the procedure of measurement of pilling resistance of Polyester fabric.

Q.4) Attempt any THREE of the following.

12 Marks

- a) Calculate cloth cover factor of cotton fabric with following data
Warp count – 60 Ne,
Weft count – 40 Ne,
EPI – 80 and PPI – 60.
- b) Describe the procedure for measurement of water repellency with Spray test with neat sketch and ratings.
- c) Explain the effect of yarn unevenness on yarn and fabric properties.
- d) Suggest the relevant method for measurement of twist in polyester spun single yarn with procedure and a labeled sketch.
- e) Describe the use of four end points for Fabric abrasion testing of suiting fabric.

Q.5) Attempt any TWO of the following.

12 Marks

- a) Calculate the yarn number in English, Tex and Denier count systems for yarn cone weighing 1.8 kg and 250000 meters length.
- b) Describe with sketch the procedure of measurement of tensile strength of PV blend fabric.
- c) Describe the procedure for measurement of fabric water resistance for tarpaulin fabric on Hydrostatic water head tester with neat sketch.

Q.6) Attempt any TWO of the following.

12 Marks

- a) Calculate weight of Cotton fabric with following data,
Warp count – 16 Ne, Weft count – 10 Ne,
EPI – 60, PPI – 40, Warp crimp – 6% and Weft crimp – 8%.
- b) Calculate Bending modulus of viscose sateen fabric with following data,
Fabric overhanging length – 3.8cms,
Fabric weight – 64 mg per sq. cm and
Fabric thickness – 0.025cm.
- c) Describe procedure for measurement of tearing strength of cotton fabric on tearing strength tester with neat sketch.

Scheme – I

Sample Test Paper - I

Programme Name : Diploma in Textile Technology

Programme Code : TC

Semester : Third

Course Title : Textile Testing

Max. Marks : 20

22364

Time: 1 Hour

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR.

08 Marks

- a) Define Tex and Denier with expression.
- b) Define twist and its types with relevant sketch.
- c) Define variations and its types.
- d) Describe the procedure for Fabric width measurement.
- e) Define Wear and Abrasion.
- f) Draw neat labeled sketch of yarn evenness tester.

Q.2 Attempt any THREE.

12 Marks

- a) Calculate yarn number of polyester filament yarn in Tex and Denier systems of 1000 yards length weighing 18 grams.
- b) Suggest the relevant method for twist measurement of cotton double yarn with procedure and neat sketch.
- c) Calculate crimp percentage of warp and weft yarn of length 11 cm in fabric and extended lengths are 11.65 cm and 11.9 cm respectively.
- d) Suggest the relevant method for measurement of threads per unit length for synthetic filament yarn fabric with procedure and neat sketch.

Scheme – I

Sample Test Paper - II

Programme Name : Diploma in Textile Technology

Programme Code : TC

Semester : Third

Course Title : Textile Testing

Max. Marks : 20

22364

Time: 1 Hour

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR.

08 Marks

- a) Define abrasion and its types.
- b) Calculate tenacity of 40Ne cotton yarn having 265grams breaking strength.
- c) Calculate CSP of PC blend yarn have 105lbs lea strength and 2.24gram lea weight.
- d) Define Air-Permeability
- e) Draw neat labelled diagram for spray test of fabric.
- f) Give sample preparation method for Tensile strength.

Q.2 Attempt any THREE.

12 Marks

- a) Calculate Bending modulus of fabric having 3.4cm bending length, 80 mg/sq. cm weight and 0.035cm thickness.
- b) Describe procedure with neat labelled diagram for single yarn strength measurement.
- c) Describe procedure for measurement of water resistance by Hydrostatic head test with neat labelled diagram.
- d) Explain working of strain gauge principle of tensile strength measurement with neat labelled diagram.
- e) Calculate Drape coefficient of cotton fabric with following particulars;
Draped pattern paper weight – 3grams, paper weight – 43 mg per sq.cm
Sample size – 10' diameter and supporting disc diameter – 5".