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Sixth Semester B.Tech. Degree Examination, June/July 2023

Textile Testing - II

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. What are Short, Medium and Long term variations? (04 Marks)
- b. Explain the terms: Periodic variation, Limit irregularity and Index of irregularity. (06 Marks)
- c. With a neat line diagram, explain the Uster evenness tester to determine evenness of Slicker, Roving and Yarn. (10 Marks)

OR

- 2 a. Give the importance of Variance – length curves. (04 Marks)
- b. State the importance of spectrogram. Give the mass variation diagram and its importance. (06 Marks)
- c. With a neat line diagram, explain the measurement of yarn Hairiness by Shirley yarn hairiness tester. (10 Marks)

Module-2

- 3 a. A square fabric of 20 × 20 cm, weighs 4.75 gms, find the fabric weight in grams per square meter and ounces per square yard. (04 Marks)
- b. Define the terms: Air permeability, Air resistance and Air porosity of fabrics. (06 Marks)
- c. Explain the method used to determine fabric flammability using 45° degree flammability testers. (10 Marks)

OR

- 4 a. Explain briefly methods used to measure fabric length and width. (04 Marks)
- b. State the importance of fabric thickness. Give the precautions to be taken during measurement. (06 Marks)
- c. Describe the method of determination of Fabric Air permeability and Air resistance. (10 Marks)

Module-3

- 5 a. Give an account of the various methods used to measure the breaking load of fabric. (04 Marks)
- b. Define Fabric Hand. State the need for objective evaluation of fabric properties. (06 Marks)
- c. Give the sixteen fabric parameters, their symbols and characteristics measured on KES - F system. (10 Marks)

OR

- 6 a. How is 'Drape' measured? What is the significance of it in dress material? (04 Marks)
- b. State the importance of crease resistance in Textile fabrics. (06 Marks)
- c. Describe the working of a Hydraulic bursting strength tester, with line diagram. (10 Marks)

Module-4

- 7 a. Give the importance of water and fabric relationship. (04 Marks)
b. Define the terms : Water proof , shower proof and Water repellency of fabrics. (06 Marks)
c. Explain how do you determine the following :
i) Fabric sinking time ii) Fabric drop absorbency time. (10 Marks)

OR

- 8 a. Differentiate between Water proof and Water repellency of fabrics. (04 Marks)
b. State the importance of Water penetration in fabrics. (06 Marks)
c. With a neat sketch, explain the method of testing fabric water repellency by spray tester. (10 Marks)

Module-5

- 9 a. Give a brief account of the following :
i) Serviceability ii) Wear. (04 Marks)
b. State the phenomena of fabric shrinkage on wet treatment. (06 Marks)
c. Describe the method of preparing acidic and alkaline test liquor for estimation of colour fastness to perspiration. (10 Marks)

OR

- 10 a. Distinguish between Serviceability , Wear and Abrasion resistance of fabric. (04 Marks)
b. State the importance of dimensional stability of fabrics. (06 Marks)
c. Describe the method of testing and assessing fabric pilling. (10 Marks)

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