



MACHAKOS UNIVERSITY

University Examinations 2020/2021

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF FASHION DESIGN AND MARKETING

THIRD YEAR FIRST SEMESTER EXAMINATION

BACHELOR OF SCIENCE (FASHION DESIGN AND MARKETING)

HFM 308: TEXTILE TESTING AND PERFORMANCE

DATE: 16/8/2021

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

This paper consists of **FIVE** questions.

Answer **Question 1** and any other **TWO** questions

Question 1 carries 20 marks

Question 2-5 carry 15 marks each

QUESTION ONE (20 MARKS)

You have been assigned as a textiles testing specialist at Kenya Bureau of Standards to perform various duties and assignments;

- a) Explain to a colleague three (3) major reasons why you carry out fiber testing. (3 marks)
- b) Identify any three (3) physical features of a fibre that are affected by the amount of moisture they absorb (3 marks)
- c) Elaborate to your boss the difference between primary and secondary characteristics of textile citing any two (2) examples in each case (6 marks)
- d) As you carry out sampling of fibers before testing, state three (3) main conditions that a good sample must satisfy (3 marks)
- e) Explain to your colleague, five requirements for fiber forming polymers (5 marks)

QUESTION TWO (15 MARKS)

You have been provided with different types of textile fibers. Discuss five (5) main methods you would use to identify them

QUESTION THREE (15 MARKS)

With the aid of diagrams, elaborate to your fellow students three (3) methods that are used in measuring tearing strength in fabrics

QUESTION FOUR (15 MARKS)

While measuring fabric thickness, Mr. Ken noticed variation in the results for the same fabric measured twice. Elaborate five (5) factors that might have affected the results.

QUESTION FIVE (15 MARKS)

Explain five (5) primary characteristics of textile fibers.