



MACHAKOS UNIVERSITY
University Examinations for 2019/2020 Academic Year
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF FASHION DESIGN AND MARKETING
SECOND YEAR SECOND SEMESTER EXAMINATION FOR
DIPLOMA IN FASHION DESIGN AND MARKETING
HFM 043: TEXTILE PERFORMANCE TESTING

DATE: 22/10/2020

TIME: 8.30-10.30 AM

INSTRUCTIONS:

Answer question one and any other two questions

QUESTION ONE (30 MARKS)

- a) Define the following terms
- i. Moisture regain (2 marks)
 - ii. Abrasion (2 marks)
- b) Complete the burning test table below. (4 marks)

Fabric	In flame	Odour
Linen		
Silk		
Acetate		
Viscose		

- c) Differentiate between
- i. Grab test and cut strip test (2 marks)
 - ii. Stains and solvent test of fabric (2 marks)
- d) State the function of the following instruments
- i. Comb sorter (1 mark)
 - ii. Stelometer (1 mark)
- e) Outline three defects found in knitted fabric (3 marks)
- f) Describe ONE (1) flammability testing of fibers (3 marks)

QUESTION TWO (15 MARKS)

- a) As a supervisor in Kenya Bureau of Standards in the textile testing section, explain five (5) objectives of textile testing to your staff (10 marks)
- b) Briefly outline five (5) factors which contribute to thermal property (5 marks)

QUESTION THREE (15 MARKS)

Using a well labelled diagram, describe water spray repellency test.

QUESTION FOUR (15 MARKS)

- a) John a supervisor of a textile industry needs to check defects of woven fabric. Explain any five (5) defects found in woven fabric. (10 marks)
- b) As a trainer in a textile laboratory explain to your staff any two methods of abrasion testing of fibers. (5 marks)

QUESTION FIVE (15 MARKS)

You are a supervisor in a textile testing laboratory, discuss the identification process of cotton using this sub heading

- a) Reaction to heat (4 marks)
- b) Microscopy (4 marks)
- c) Solvent test (4 marks)
- d) Feeling test (3 marks)