



MACHAKOS UNIVERSITY

University Examinations 2018/2019

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 AND TESTING

DATE: 30/4/2019

TIME: 2:00 – 4:00 PM

INSTRUCTIONS

Answer question 1 and any other two questions

a) Define the following terms (2x3marks =6)

- i) Moisture regain
- ii) Thermal properties
- iii) Fiber fineness

b) Fill in the table

Fabric	Solvent and Temperature that dissolve it
Cotton	
Silk	
Acetate	
Nylon 6	

(4 marks)

c) Differentiate between

- i. Grab test and cut strip test
- ii. Flex and flat abrasion test
- iii. Stains and solvent test of fabric

(6 marks)

d) State the function of the following instruments

- i) Comb sorter
- ii) Stelometer

(4 marks)

- e) Briefly describe the process of determining
 - i) fiber length
 - ii) Water absorbency (4 marks)
- f) Outline three (3) defects found in knitted fabric (3 marks)
- g) Briefly explain the flammability testing (3 marks)

QUESTION TWO (20 MARKS)

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

QUESTION THREE (20 MARKS)

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

QUESTION FOUR (20 MARKS)

John a supervisor of a textile industry need to check defects of woven fabric. Explain ten (10) defects found in woven fabric.

QUESTION FIVE (20 MARKS)

- a) Mwangi works in a textile testing laboratory explain the identification process of cotton using this sub heading
 - i) Reaction to heat (4 marks)
 - ii) Microscopy (4 marks)
 - iii) Element analysis (4 marks)
- b) Describe the process of testing tensile strength (8 marks)