



MACHAKOS UNIVERSITY

University Examinations 2021/2022

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF FASHION DESIGN AND MARKETING

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (FASHION DESIGN AND MARKETING)

HFM 100: INTRODUCTION TO TEXTILES

DATE: 28/1/2022

TIME: 8.30-10.30 AM

INSTRUCTIONS

This paper consists of **FIVE questions**.

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

Question 1 carries 30 marks

Question 2-5 carry 20 marks each

QUESTION ONE (COMPULSORY) (30 MARKS)

- Highlight the TWO (2) main classification of silk, giving an example in each. (2 marks)
- Calculate the moisture regain and content of the following sample:
Sample weight = 5.5g
Dry sample weight = 5.0g (2 marks)
- Briefly explain TWO (2) methods used in extraction of flax fibers (4 marks)
- Explain any TWO (2) methods of man-made fiber extrusion. (4 marks)
- Using an illustration, show the different yarn spinning routes for a carded and a combed yarn. (4 marks)
- Outline any TWO (2) mechanical finishing processes used in surface treatment of textiles. (4 marks)
- List any FOUR (4) textile chemical finishing processes (4 marks)
- With the aid of a diagram, define discharge printing. (4 marks)
- Draw a chart illustrating the classification of knitting machines. (4 marks)

QUESTION TWO (20 MARKS)

You are teaching a course on ‘Introduction to Textiles’. Explain to your students any FIVE (5) primary and FIVE (5) secondary properties that a fiber should possess to qualify to be used as a textile fiber.

QUESTION THREE (20 MARKS)

As an expert in yarn production, explain to your subordinates any FIVE (5) objectives of the following processes.

- a) Drawing process (10 marks)
- b) Blowroom process (10 marks)

QUESTION FOUR (20 MARKS)

You are being interviewed for the weaving manager’s position in a weaving mill, discuss any FIVE (5) weaving preparatory processes.

QUESTION FIVE (20 MARKS)

You are planning to set-up a textile branding business. Discuss any FIVE textile printing methods you would consider.