



MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF FASHION DESIGN

FIRST YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN FASHION DESIGN AND MARKETING

HFM 108: FASHION FABRICS

DATE: 25/9/2019

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

- a) Define the following methods of fabric formation.
- i) Weaving [2 marks]
 - ii) Braiding [2 marks]
 - iii) Tufting [2 marks]
 - iv) Nonwoven [2 marks]
 - v) Knitting [2 marks]
- b) Demonstrate the (2) TWO methods of weave representation [2 marks]
- c) Explain any (3) THREE end uses of braided fabrics [3 marks]
- d) Highlight any (2) TWO differences between the warp knitting and weft knitting [4 marks]

- e) Outline (5) FIVE basic mechanisms necessary for continuous weaving to occur [5 marks]
- f) Describe any (3) THREE bonding techniques applied during formation of nonwovens

[6 marks]

QUESTION TWO

You have been contracted as a textile consultant with a weaving mill. Explain to your clients (5) FIVE weaving preparatory processes and their importance during the weaving process. [20 marks]

QUESTION THREE

Due to the ban on plastic bags in Kenya, there is an increased use of nonwovens as a replacement. Discuss any other (5) FIVE major applications of nonwoven fabrics, giving two examples in each case

[20 marks]

QUESTION FOUR

You are invited for a job interview in a knitting firm. Describe to the interviewing panel the process of loop formation during the knitting process [20 marks]

QUESTION FIVE

As the head of fabric design department, construct the weave representation diagrams for the following weaves for your subordinates'. Indicate any (2) TWO applications of fabrics made from each of the weave patterns. [20 marks]

- i) 1/1 plain weave
- ii) 3/3 matt weave
- iii) 2/2 matt weave
- iv) 1/2 twill weave
- v) 1/3 twill weave