



MACHAKOS UNIVERSITY

University Examinations 2017/2018

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF FASHION DESIGN AND MARKETING

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

DIPLOMA IN FASHION DESIGN AND MARKETING

HFM 032: TEXTILE SCIENCE

DATE: 6/12/2017

TIME: 11:00 – 1:00 PM

INSTRUCTIONS:

This paper consists of FIVE questions. Answer question one and any other two.

1.
 - a) Define the following terms:
 - i) fibre (2 marks)
 - ii) yarn (2 marks)
 - iii) weaving (2 marks)
 - iv) piling (2 marks)
 - b) State FOUR general properties of textile fibres. (4 marks)
 - c) Name any FOUR natural fibres. (2 marks)
 - d) Briefly explain the burning characteristics of the following fibres.
 - i) cotton (2 marks)
 - ii) wool (2 marks)
 - iii) acrylic (2 marks)
 - iv) polyester (2 marks)
 - e) State two disadvantages of weighted silk. (2 marks)

- f) Outline two reasons that make elastomeric fibres popular for sportswear. (2 marks)
- g) Differentiate between hydrophilic and hydrophobic. (4 marks)
2. a) Specify six qualities that are desirable for making children's clothes. Explain why these qualities are desirable. (12 marks)
- b) Discuss the classification of finishes in terms of processes. Explain what happens in each of these processes. (8 marks)
3. a) Illustrate how textile fibres are classified. Give relevant examples in each case. (12 marks)
- b) Justify the suitability of acrylic for making bedsheets. (4 marks)
- c) Briefly explain why finishes are applied to fabrics (4 marks)
4. a) Discuss the production process of viscose rayon. (16 marks)
- b) Highlight four fabric qualities desirable for curtains. (4 marks)
5. a) Discuss the process of making bonded fabrics and give two advantages of such fabrics. (6 marks)
- b) As a yarn manufacturer you are required to produce sewing thread . Describe six qualities you would ensure the sewing thread has giving reasons for your choice. (6 marks)
- c) Considering the properties of silk, explain why it is used for evening wear and garments for special occasions. (8 marks)