



MACHAKOS UNIVERSITY

University Examinations 2022/2023 Academic Year

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF FASHION DESIGN AND MARKETING

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (FASHION DESIGN AND MARKETING)

HFM 308: TEXTILE PERFORMANCE TESTING

DATE:13/12/2022

TIME: 2:00 – 4:00P.M

INSTRUCTIONS: Answer question ONE and any other TWO questions

QUESTION ONE (20MARKS)

- a) Define the following terminologies as used in textile performance testing.
- i. Fume fading
 - ii. Abrasion
 - iii. Frosting
 - iv. Moisture equilibrium
 - v. Flexibility. (5 marks)
- b) Name any three categories of properties that one needs to focus on when testing textile materials. (3 marks)
- c) State and briefly explain the three requirements that a textile sample must satisfy before any meaningful tests can be carried out. (6 marks)
- d) Outline six factors that influence results when testing for abrasion. (6 marks)

QUESTION TWO (15MARKS)

- a) With aid of diagrams explain the air-flow method used in determining specific surface of textile material. (11 marks)
- b) A piece of cloth weighs 150gms when conditioned, the cloth is then oven-dried and the new weight becomes 145gm. Calculate the moisture content and regain of the cloth. (4marks)

QUESTION THREE (15MARKS)

In determining dimensional stability of fabrics there are various methods used. However, there is a standard procedure that outlines the steps to be used in carrying out any dimensional changes test. Discuss the five basic steps followed. (15 marks)

QUESTION FOUR (15MARKS)

Explain the methods one would use to determine the twist of a filament yarn. (15 marks)

QUESTION FIVE (15MARKS)

- a) Explain four defects that may occur in a fabric as a result of imperfections in the yarns. (4 marks)
- b) Discuss eleven flaws that could be detected in finished knitted fabrics. (11 marks)