



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2015/2016

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF FASHION DESIGN AND MARKETING

FIRST SEMESTER EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN
FASHION DESIGN AND MARKETING

HFD 308: TEXTILE PERFORMANCE TESTING

Date: 5/8/2016

Time: 8:30 – 10:30 AM

INSTRUCTIONS:

Answer Question ONE and any other TWO questions

QUESTION ONE

- a) Discuss how to measure the following textile parameters
 - i) Tensile Strength (Strip Method) (5 marks)
 - ii) Abrasion resistance (5 marks)
 - iii) Pilling (5 marks)
 - iv) Tear strength (5 marks)
- b) Highlight **FIVE** factors that can affect tensile testing (5 marks)
- c) Explain **FIVE** reasons for textile testing (5 marks)

QUESTION TWO

- a) Discuss **FIVE** washing parameters that can affect colour fastness of textiles (10 marks)
- b) State **FIVE** factors that can determine colour fastness of textiles (5 marks)
- c) Highlight **FIVE** colour fastness tests done on textiles (5 marks)

QUESTION THREE

- a) Discuss the following techniques for testing fabric composition
 - i. Optical/visual identification (3 marks)
 - ii. Density/physical separation (3 marks)
 - iii. Chemical test (3 marks)
 - iv. Burning test (3 marks)
 - v. Staining test (3 marks)
- b) List **FIVE** modern techniques used in testing fabric composition (5 marks)

QUESTION FOUR

- a) Explain **FIVE** ways that can be used to measure yarn twist (10 marks)
- b) Highlight **FIVE** effects of twist on yarn and fabric properties (5 marks)
- c) List **FIVE** faults on textiles caused by immature fibers (5 marks)

QUESTION FIVE

- a) Discuss the scope of textile testing (10 marks)
- b) Explain **TWO** techniques that can be used to sample cotton fibers (5 marks)
- c) Discuss **FIVE** sources of sampling errors in textile testing (5 marks)