



**UNIVERSITY OF ESWATINI**  
**FINAL EXAMINATION PAPER**

**PROGRAMME :** BACHELOR OF SCIENCE IN TEXTILE  
APPAREL DESIGN and MANAGEMENT YEAR  
IV

**COURSE CODE :** TAD403/ TADM 402

**TITLE OF PAPER :** QUALITY CONTROL AND ASSURANCE IN  
TEXTILES AND APPAREL

**TIME ALLOWED :** TWO (2) HOURS

**INSTRUCTIONS :** ANSWER QUESTION ONE (1)  
AND ANY OTHER TWO (2) QUESTIONS

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THE CHIEF INVIGILATOR**

**QUESTION 1 (COMPULSORY)**

- a) Discuss how the quality of a product affects customer satisfaction. Use examples where relevant (10 Marks)
- b) Briefly explain your understanding of the following specifications; (8 Marks)
  - i. Closed specifications
  - ii. Open ended specification
- c) Differentiate between the following types of inspection in terms of where they occur, what they entail and how they affect product quality (15 Marks)
  - i. Source
  - ii. In-process
  - iii. Product
- d) Explain your understanding of thermal comfort and give **three (3)** fabric properties that help maintain thermal comfort (5 Marks)
- e) Define dimensional stability (2 Marks)

[40 MARKS]

**QUESTION 2**

- a) Give **three (3)** differences between quality control and quality assurance (6 Marks)
- b) Fit is an important element of finished products. Explain how this is evaluated during finished product evaluation (4 Marks)
- c) Discuss the importance of material testing to product development. Include relevant examples in your discussion (10 Marks)
- d) Abrasion resistance of the textile materials is very complex phenomenon and affected by many factors. Discuss how each of the following factors affects abrasion resistance of a material. (10 Marks)
  - i) Fibre type
  - ii) Fibre properties
  - iii) Yarn twist
  - iv) Fabric properties
  - v) Finishing processes

[30 MARKS]

**QUESTION 3**

- a) Describe any **three (3)** qualitative procedures that can be used to identify fibres present in a textile material (15 Marks)
- b) Discuss the importance of elongation and elasticity in ensuring comfort in garments (10 Marks)
- c) Define reproducibility and state why it is an important dimension when developing standard test. (5 Marks)

[30 MARKS]



**QUESTION 4**

- a) You have been tasked with designing seat covers for a local movie theatre. Give a fabric that will be suitable for such an application, finishes that can be applied to the fabric and three different tests that you will conduct to determine the suitability of the chosen material. Your answer should include justification for the material and finish selected as well as the test methods performed. **(15 Marks)**
- b) Make a sketch of a product of your choice and identify different zones that can be used to evaluate the product for defects. Explain your rationale for the boundaries of the zones. **(15 Marks)**

**[30 MARKS]**