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1ST SEM. 2016/17

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UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER

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

COURSE CODE : 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 **six (6)** dimensions of quality, giving an example for each dimension. (18 Marks)
- b) Give a detailed description of the Cantilever stiffness test and show how the stiffness of a material is determined using this test. (15 Marks)
- c) List **five (5)** factors that might affect the accuracy of a test results? (5 Marks)
- d) Why is it important for testing of materials to be done under standard conditions? (2 Marks)

[TOTAL MARKS =40]

QUESTION 2

- a) The Company that you work for has decided to use an Independent testing facility for all its testing needs, as a Quality Manager, discuss the factors you will consider when choosing the testing facility (9 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)
- c) Briefly explain the following types of shrinkage:
 - i. Relaxation shrinkage
 - ii. Felting shrinkage
 - iii. Residual shrinkage(6 Marks)

[TOTAL MARKS = 30]

QUESTION 3

- a) Quality is perceived differently based on who is defining it. Describe five different quality perceptions (20 Marks)
- b) Explain the difference between CRT and CRE based tensile testing machines. (4 Marks)
- c) With the aid of a diagram show how the specimen in a modified grab test is prepared. (6 Marks)

[TOTAL MARKS =30]

QUESTION 4

- a) Discuss the application of materials testing to product development. (12 Marks)
- b) Discuss **five (5)** qualitative procedures that can be used to determine the generic fibres present in a material. (15 Marks)

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c) Name **three (3)** organisations involved in developing standards in Textile. **(3 Marks)**

[TOTAL MARKS = 30]