

1ST SEM, 2009/2010



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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME : BACHELOR OF SCIENCE IN
HOME ECONOMICS, HOME
ECONOMICS EDUCATION AND
TEXTILE APPAREL DESIGN
MANAGEMENT YEAR IV**

COURSE CODE : TADM 404

TITLE OF PAPER : ADVANCED TEXTILE SCIENCE

TIME ALLOWED : TWO (2) HOURS

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

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GRANTED BY THE CHIEF INVIGILATOR**

ADVANCED TEXTILE SCIENCE

QUESTION 1

- a) Name and discuss four (4) laws and regulations that deal with “truths-in-fabrics.” $4 \times 3 = 12$
- b) List and discuss five (5) ‘Smart’ garments for the future and their advantages to consumers or environment. Tabulate your answer in this way:
- | Smart Garment | Discussion | Advantages |
|---------------|------------|------------|
| i) | | |
| ii) | | |
- $5 \times 4 = 20$
- c) Name and discuss four (4) topics in Dress and Technology that bring ethical issues. $4 \times 2 = 8$

[TOTAL POINTS 40]

QUESTION 2

- a) List and discuss four (4) environmental laws and regulations that were passed to guide textile industries in keeping the environment clean. $4 \times 3 = 12$
- b) Name and discuss five (5) “Green Fibres” or “Eco-Friendly Fibres” and their importance. $5 \times 3 = 15$
- c) What is nanotechnology? **3**

[TOTAL POINTS 30]

QUESTION 3

- a) List and discuss three (3) properties of spandex fibres. $3 \times 2 = 6$
- b) Name four (4) compound fabrics you know and their uses. $4 \times 2 = 8$
- c) Which compound fabric did you make in the clothing laboratory? 2
- d) Discuss the end uses of the compound fabric you named in (c) above under the following:
- For which season would it be suitable for and why?
 - Why did one of you make an oven glove?
 - Why did one of you make a place mat?
 - Why is this compound fabric used for “protective vests”
 - Discuss the aesthetic part of the fabric. $5 \times 2 = 10$

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- e) By means of a well labelled diagram, show the structure of a fancy yarn. 4

[TOTAL MARKS 30]

QUESTION 4

- a) By means of well labelled diagrams, show six (6) classes of care symbols that were passed by Permanent Care Labelling Regulation of 1972. 6 x 2 = 12
- b) When were compound yarns developed and what is the other name? 4
- c) Which special-use fibres would you choose for the following and why?
- i) Bullet proof vest and knife resistant vest.
 - ii) Noise abatement curtains
 - iii) Fire fighters coat or foundry workers clothes.
 - iv) Protective garment for pesticide spraying or infectious diseases.
 - v) Isolation wards 5 x 2 = 10
- d) To evaluate durability of fabrics in the laboratory, which four (4) performance checks of the fabric would you do? 4

[TOTAL POINTS 30]