



1st SEM. 2012/13

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

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

COURSE CODE: TADM 404

TITLE OF PAPER: CONTEMPORARY TEXTILES

TIME ALLOWED: TWO (2) HOURS

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

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY
THE CHIEF INVIGILATOR**

QUESTION 1 (COMPULSORY)

- a) Discuss **five (5)** factors on how nanotechnology has impacted the textile industry/society. (10 Marks)
- b) List and discuss **four (4)** environmental laws and regulations that ensure textile industries keep the environment safe and clean. (12 Marks)
- c) Discuss **four (4)** points to compare and contrast woven and knitted fabrics. (8 Marks)
- d) Multiple choice questions. **Select and give a justification for your answer**
- i) Used in protective clothing because of a combination of softness and inherent flame-retardancy
 - A. Modacrylic
 - B. Nylon
 - C. Polyester
 - D. olefin
 - E. rayon
 - ii) The information that is required to be present on a label or hangtag at point of purchase includes:
 - A. Generic fibre content and percentage
 - B. Garment size
 - C. Recommended care procedure
 - D. All of the above is required
 - E. Only A and C are correct
 - iii) A fibre that has good dimensional stability does not
 - A. Elongate with use
 - B. Break when bent repeatedly
 - C. React with chemicals
 - D. Shrink or stretch when cleaned

- iv) The name of the legislation regulating the flammability of textile products is the
- A. Flame Retardant Fabrics Act.
 - B. Nonflammable Fabrics Acts
 - C. Protective Clothing Act
 - D. Flammable Fabric Act
 - E. Children's Sleepwear Act
- v) What fabrication method uses a backcoating to lock yarns in place
- A. Knit terry
 - B. Fake fur
 - C. Tufting
 - D. Flocking
 - E. Supported film
- (5x2=10 Marks)**

[TOTAL MARKS = 40]

QUESTION 2

- a) Give **five (5)** reasons why you would buy a nanotex shirt as opposed to a 100% cotton shirt. **(5x2=10 Marks)**
- b) Differentiate and give **two (2)** examples of additive and subtractive finishes. **(2x3= 6 Marks)**
- c) i) What elements are introduced into the cotton fibre during Proban treatment? **(2 Marks)**
- ii) Explain why Proban treated cotton is comfortable? **(2 Marks)**
- iii) Give **three (3)** points on how you would ensure durability of the Proban finish? **(6 Marks)**
- d) Describe **four (4)** ways you would identify a single jersey knit fabric? **(4 Marks)**

[TOTAL MARKS = 30]

QUESTION 3

- a) Describe what the following laws and regulations aim to safeguard and the product category to which they apply.
- i) Flammable Fabrics Act of 1952 and its amendment
 - ii) Textile Fibre Product Identification Act of 1960 and its amendment
 - iii) Wool Product Labeling Act of 1939 and its 1986 amendment
 - iv) Permanent Care Labeling Regulation of 1972 and its 1984 amendment
- (20 Marks)**
- b) List and briefly discuss **five (5)** protective fibres with chemical, or heat or fire resistance.
- (10 Marks)**

[TOTAL MARKS = 30]

QUESTION 4

- a) Give and discuss **three (3)** areas in which smart garments may be beneficial to the consumer.
- (15 Marks)**
- b) Explain **four (4)** characteristics that make rib knits appropriate for cuffs, socks and knit hats.
- (8 Marks)**
- c) Give **five (5)** points on why a nanotex shirt is an example of a textile innovation
- (5 Marks)**
- d) Define high performance fibres.
- (2 Marks)**

[TOTAL MARKS = 30]