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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 404

TITLE OF PAPER : CONTEMPORARY TEXTILES

TIME ALLOWED : TWO (2) HOURS

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

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INVIGILATOR**

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QUESTION 1 (COMPULSORY)

- a) The Swaziland Environment Authority is seeking interventions on the environmental impact of Polyethylene-Terephthalate (PET) or waste plastic.
- i) Introduce the *Echo screen* or *screen fabric* made from 100% recycled PET and its properties
 - ii) Discuss the common and innovative uses for *Echo screen*
 - iii) Outline *Echo screen* production steps.
- (20 Marks)
- b) Differentiate between the following as they relate to fabric finishes:
- i) Cirèd and Moirè fabrics
 - ii) Subtractive and additive finishes
 - iii) Beetled and mercerised fabrics
 - iv) Embossed and flocked fabrics
 - v) Applied and surface designs
- (10 Marks)
- c) Describe **five (5)** performance characteristics of a work high visibility vest.
- (10 Marks)

[TOTAL MARKS = 40]

QUESTION 2

- a) Bicomponent yarns are sometimes referred to as intelligent yarns.
- i) Define and describe bicomponent yarns,
 - ii) Using illustrations; describe the two types of bicomponent yarns.
 - iii) List **four (4)** applications of bicomponent yarns and give one example for each use.
- (10 Marks)
- b) Describe how the following outwear fabrics achieve their insulative characteristics.
- i) Thermastat
 - ii) Micro- Supreme
 - iii) Polartec
 - iv) Airvantage
- (20 marks)

[TOTAL MARKS = 30]

QUESTION 3

a) Swaziland has recently experienced drought, advise apparel consumers of **two (2)** innovative technologies and how they result in apparel requiring no or minimal care in an effort to conserve water. **(10 Marks)**

b) Define engineered textiles and explained their use in:

- i) Tissue engineering
- ii) Phase Change Materials
- iii) Thermal Sensitivity

(1 + 9 = 10 Marks)

c) Describe the structure and characteristics of the following knits: give two uses for each fabric.

- i) Knitted terry
- ii) Knitted Velour

(10 Marks)

TOTAL MARKS = 30]

QUESTION 4

a) Describe the difference in the moisture management mechanism of the following emerging modified polyester fabrics

- i) Coolmax[®]
- ii) Comfortel[®]
- iii) Dri- Release[®].

(12 Marks)

b) Describe the Care Labelling Regulation, 1972 (Amended) and its importance to the apparel consumer.

(6 Marks)

c) Define textile innovation. Describe textile innovation under the following sub-headings:

- i) Textile industry and machinery
- ii) Medical textiles
- iii) Sportswear

(12 Marks)

TOTAL MARKS = 30]