2nd SEM. 2015/16



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UNIVERSITY OF SWAZILAND

MAIN EXAMINATION PAPER

PROGRAMME

BACHELOR OF SCIENCE IN

TEXTILE AND APPAREL DESIGN

MANAGEMENT YEAR IV

COURSE CODE

: TADM 410

TITLE OF PAPER : PRODUCT DEVELOPMENT

TIME ALLOWED

TWO (2) HOURS

INSTRUCTIONS

ANSWER QUESTION ONE (1)

AND ANY OTHER (2) QUESTIONS

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QUESTION 1 (COMPULSORY)

- (a) Discuss how protection and safety are achieved with the use of woven structures. (5 \times 5 = 25 Marks)
- (b) How can non-woven structures be utilised in clothing applications? (10 Marks)
- (c) Comfort mapping zones in designing for the ageing population are identified based on what factors?

(5 Marks)

[TOTAL MARKS = 40]

QUESTION 2

- (a) How does ambient lighting differ from task lighting when making an exhibition? (2 $\times 5 = 10$ Marks)
- (b) Briefly describe the action points that can be used to minimize the effects of smart clothing and wearable technology on the environment.
- (c) How does the functional design process in this course differ from fashion design?

 (2 x 5 = 10 Marks)

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[TOTAL MARKS = 30]

QUESTION 3

(a) Describe the demographic information for the first **four (4)** Living Standards Measure (LSM) levels.

 $(4 \times 3 = 12 \text{ Marks})$

(b) How does pattern making for 3D in functional wear differ from traditional pattern making in 2D?

(10 Marks)

(c) How has the geographic positioning system been used in textiles applications?

(8 Marks)

[TOTAL MARKS = 30]

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QUESTION 4

- (a) You are given a problem of ill-fitting shoes for first grade primary school going children. You are to explore the problem using Watkin's design process model. Describe key points you would include under each element in exploring the problem.
- (b) To assist you in determining the right fabric for your functional wear, what questions would you ask yourself and how would they assist you in making the right decision?

(10 Marks)

(c) What type of fabrics is suitable for ultrasonic bonding? State **two (2)** advantages of this type of joining garment parts.

(2 Marks) [TOTAL MARKS = 30]