2 <sup>ND</sup> SEM. 2018/19	
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	UNIVERSITY OF ESWATINI
	FINAL EXAMINATION PAPER
PROGRAMME :	BACHELOR OF SCIENCE IN TEXTILE APPAREL DESIGN AND MANAGEMENT YEAR II
COURSE CODE :	TAD 406 / TADM410
TITLE OF PAPER :	PRODUCR DEVELOPMENT AND EXHIBITION
FIME ALLOWED :	TWO (2) HOUDS

313

7

TWO (2) HOURS

**INSTRUCTIONS** :

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

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### PAGE 2 OF 3 TAD406/ TADM 410 (M)

# **QUESTION 1 (COMPULSORY)**

- a) Discuss with examples any four (4) categories of products that can be considered to be new products.
- b) 'Trapping 'dead air' in the textile fibres and structures is key to effective thermal (12 Marks) insulation'. Discuss five (5) ways in which this can be achieved.
- c) You have been tasked with designing a textile apparel product that will provide protection from water. Discuss two (2) ways in which this can be achieved.
- d) Define laser welding and give **four (4)** beneficial features of the process. (12 Marks) (6 Marks)

## [TOTAL MARKS= 40]

#### **QUESTION 2**

- a) Describe ultrasonic welding and give three (3) advantages and three (3) disadvantages of the process.
- b) All activities associated with manufacture of any product have an effect on the environment. Discuss how as a designer you can minimise these effects. (10 Marks)
- c) Briefly describe your understanding of phase change materials and state two (2) areas where they can be applied.
- d) Name three (3) factors that influence the temperature of the body. (8 Marks)

### (3 Marks)

# [TOTAL MARKS = 30]

### **QUESTION 3**

- a) A designer has been given a brief to design an outdoor jacket. Discuss the social, moral and environmental issues they must consider in the design of this product.
- b) In designing a product, discuss how you can meet the needs of customers better than (8 Marks) your competition
- c) Discuss the important design parameters to consider when designing base layer garments for active wear
- d) What makes textile and apparel NPD distinct from generic NPD? (8 Marks)

(4 Marks)

[TOTAL MARKS =30]

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#### **QUESTION 4**

- a) Discuss how woven fabrics can be designed to offer ease of movement.
- (15 Marks) b) Sustainability in product development needs to be considered in regard to all product components, and nonwovens are not exempt from this. Discuss two (2) ways in which these issues have been addressed within nonwoven production. (12 Marks)
- c) Briefly explain your understanding of adaptive clothing. (3 Marks)

[TOTAL MARKS = 30]