

1<sup>st</sup> SEM. 2016/17



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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

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INVIGILATOR**

**QUESTION 1 (COMPULSORY)**

- a) Discuss **four (4)** environmental laws and regulations that ensure the textile industry keeps the environment clean and safe. (20 Marks)
- b) Describe **four (4)** points on how the knit fabric structure influences its characteristics. (12 Marks)
- c) Explain why is Kevlar® regarded the best ballistic fibre. (8 Marks)

[TOTAL MARKS = 40]

**QUESTION 2**

- a) Describe the effects of irresponsible consumption of apparel and textiles on the environment. (10 Marks)
- b) Discuss the performance characteristics of the following smart technologies as used in the medical field.  
i) PDN® Prosthetic Disc Nucleus  
ii) CorpCap® Cardiac Support  
iii) Viscose Rayon hollow fibre (15 Marks)
- c) Describe how nanotechnology has improved the performance qualities of cotton. (5 Marks)

[TOTAL MARKS = 30]

**QUESTION 3**

- a) Describe the performance characteristics of the following fibres:  
i) Glass  
ii) Carbon  
iii) Aramids  
iv) Melamine (20 Marks)
- b) Compare the 100% polyester sportswear and two layer Tencel fabric and justify the need for such a blend. (10 Marks)

[TOTAL MARKS = 30]

**QUESTION 4**

- a) List **five (5)** functional finishes; give **two (2)** examples for each class. (10 marks)
- b) Using illustrations, describe **four (4)** technologies used in the manufacturing of compound fabrics. Support your answer with examples of when the characteristics of each fabric are desirable. (20 marks)

[TOTAL MARKS = 30]