UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME : BARCHELOR 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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QUESTION 1 (COMPULSORY)

a) Define and give **two (2)** examples of   i) Textile innovation

                                                 ii) Emerging fibres.   **(4 Marks)**

b) Define novelty yarns and explain **four (4)** points on their performance.   **(4 Marks)**

c) Discuss how the textile industry has impacted the environment.   **(10 Marks)**

d) Discuss the responsibility of the Environmental Protection Agency (EPA). **(10 Marks)**

e) Explain **four (4)** aesthetic finishes used to introduce the following textile properties.

    i)   Luster
    ii)   Drape
    iii)   Texture and hand   **(3 X 4 = 12 Marks)**

[TOTAL MARKS = 40]

QUESTION 2

a) Compare and contrast conventional and organic cotton.

                                               (5 X 2 = 10 Marks)

b) Identify and briefly explain **five (5)** impact factors of nanotechnology to the environment.
                                               (10 Marks)
c) Discuss **five (5)** performance criteria of a work place visibility vest.   **(10 Marks)**
                                             [TOTAL MARKS = 30]

QUESTION 3

a) Discuss **five (5)** performance characteristics of acrylic filter bags for power generation
plants.   **(10 Marks)**

b) Using illustrations discuss **five (5)** points on how the structure of a simple weft knit differs
from the structure of a simple warp knit.   **(10 Marks)**

c) Discuss **five (5)** compound fibres discussed in class.   **(10 Marks)**

                                             [TOTAL MARKS = 30]

QUESTION 4

a)   Briefly explain the performance of knit fabrics under the following headings:
i)   Elongation /Extensibility
ii)   Insulation and air permeability
iii)   Pilling and snagging
iv)   Strength and abrasion resistance
v)   Relaxation and shrinkage   **(10 Marks)**

b) List and briefly describe **five (5)** performance areas of technical (high performance) fibres/fabrics.   **(10 Marks)**

c) List any **five (5)** "Green fibres" and discuss **two (2)** points on how each is eco-friendly.

(10 Marks)

[TOTAL MARKS = 30]