



2nd SEM. 2012/2013

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UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER

**PROGRAMME : BACHELOR OF SCIENCE IN TEXTILE
APPAREL DESIGN and MANAGEMENT YEAR II**

COURSE CODE : TADM 206

TITLE OF PAPER : FABRIC CONSTRUCTION DESIGN

TIME ALLOWED : TWO (2) HOURS

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

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THE CHIEF INVIGILATOR**

QUESTION 1 (COMPULSORY)

- a) With illustrations, describe the **five (5)** segments of a textile supply chain. (10 Marks)
- b) With information gathered during the field trip describe in detail the yarn processing and weaving taking place at Rosecraft. (10 Marks)
- c) Discuss **four (4)** points to compare and contrast woven and knitted fabrics. (8 Marks)
- d) Explain **five (5)** uses of non-woven fabrics. (10 Marks)
- e) Using the a) Tex and b) Denier systems to calculate the linear density of the following yarn: 500metres and weighs 50 g. (2 Marks)

[TOTAL MARKS = 40]

QUESTION 2

- a) Describe **five (5)** points on the environmental impact of the weaving process. (10 Marks)
- b) Using simple illustrations differentiate between the **four (4)** types of creel systems. Give **one (1)** advantage and **one (1)** disadvantage for each. (20 Marks)

[TOTAL MARKS = 30]

QUESTION 3

- a) Name and give **one (1)** function for the **five (5)** parts of a loom. (10 Marks)
- b) Explain the **three (3)** factors that determine a weave structure. (6 Marks)
- c) Give **five (5)** characteristics that make rib knits suitable for collars, necklines, cuffs and lower edges of sweaters. (10 Marks)
- d) Define the following:
 - i) Warping
 - ii) Winding
 - iii) Creeling
 - iv) Looming(4 Marks)

[TOTAL MARKS = 30]

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QUESTION 4

- a) Explain the **three (3)** steps followed in preparing yarn before weaving. (6 Marks)
- b) Name and draw the **three (3)** structures of basic weaves and give **three (3)** differences between their fabrics for each. (12 Marks)
- c) Describe **five (5)** non-woven fabric forming techniques. (10 Marks)
- d) Define yarn sizing. (2 Marks)

[TOTAL MARKS = 30]