

2ND SEM, 2010/2011



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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

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

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GRANTED BY THE CHIEF INVIGILATOR**

FABRIC CONSTRUCTION DESIGN

QUESTION 1

- a) List and discuss two (2) yarn sizing systems used in textile industry, with examples. 2 x 5 = 10
- b) Name and discuss five (5) types of yarns you know. 5 x 2 = 10
- c) By means of a well labelled diagram, show the supply chain of textiles from farmers or farm ranches to textile consumers. 15
- d) Calculate linear density of 100 metres of yarn that weighs 2.5 grams. 5

[TOTAL MARKS = 40]

QUESTION 2

- a) Given a piece of woven fabric without selvedge, discuss how you would identify the fabric face or front and back or reverse. Tabulate your answer in this way:

Fabric face or front	I	Fabric back or reverse
	I	

8 x 2 = 16

- b) List and discuss four (4) types of weft knitted fabric structures you made or you know. 4 x 2 = 8
- c) Show the formula you would use for the calculation of woven fabric weight and other details that go with it. 2 x 3 = 6

[TOTAL MARKS 30]

QUESTION 3

- a) When choosing the warp yarns for weaving your frame, which five (5) types of fibres are suitable you would choose and why? 7
- b) Name three (3) of the loom accessories you saw at Bethany weaving cottage industry and their uses. 3 x 2 = 6
- c) Non-woven fabrics are the fastest growing segment of the textile industry. Discuss five (5) non-clothing areas where they are used and supply suitable examples. 5 x 2 = 10

d) Describe four (4) properties of rib knitted fabrics that make them popular for cuffs, socks and knitted hats. 4

e) Show the formula you would use for the calculation of knitted fabric area density. 3

[TOTAL MARKS 30]

QUESTION 4

a) List and discuss five (5) reasons why yarns are tested? $5 \times 2 = 10$

b) Why is the amount of twist in a yarn important? Discuss. 3

c) Name and discuss three (3) reasons why blends are so important in the textile industry? $3 \times 2 = 6$

d) Why are plain weaves fabrics more commonly used than other weaves? 5

e) Name three variations of plain weave or fabric construction designs. 3

f) List three special weaves you know. 3

[TOTAL MARKS 30]