



2nd SEM. 2011/12

**PAGE 1 OF 3
TADM 206 (M)**

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME : BACHELOR OF SCIENCE IN
TEXTILE AND APPAREL DESIGN
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 (2) QUESTIONS**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN
GRANTED BY THE CHIEF INVIGILATOR**

QUESTION 1 [COMPULSORY]

- (a) Describe the first **five (5)** production segments of the textile supply chain.
2 x 5 = (10)
- (b) Differentiate the **four (4)** types of ring spun yarns and the difference between yarns made on an open-end and air jet spinning frames.
2 x 5 = (10)
- (c) Define a yarn count and describe the commonly used yarn count system in the industry. Calculate the linear density of a yarn that weighs 50g and a length of 500m. Convert the answer into denier.
(10)
- (d) In 2005, there was a major change in the MFA that had repercussions in the textile sector across the globe. What strategies were proposed in order to cope with the change?
2 x 5 = (10)
[Total Marks = 40]

QUESTION 2

- (a) Describe **seven (7)** yarn properties that affect fabric appearance. **(14)**
- (b) Briefly explain **three (3)** key steps that are involved in weaving preparation.
3 x 3 (9)
- (c) Calculate the warping time if the machine speed is 800m/min with a sheet length of 10 000m, efficiency of 80%, and 10 min for removal and loading time of warp beam. **(4)**
- (d) What do the following abbreviations stand for: CVC, TC and C. **(3)**
- [Total Marks = 30]**

QUESTION 3

- (a) Describe the difference between blends and mixtures in yarn making and in fabric making. **(8)**

PAGE 3 OF 3
TADM 206 (M)

- (b) Define drawing in yarn making and state the processes that involve drawing in your making. State how drafting is involved in drawing. (6)
- (c) Differentiate between twill and sateen weaves. $2 \times 6 = (12)$
- (d) State **four (4)** basic parameters that contribute towards the end product of woven fabrics. (4)

[Total Marks = 30]

QUESTION 4

- (a) Describe the following fabric weaves:
 Leno
 Crepe
 Pique
 Basket
 Rib
 $2 \times 5 = (10)$
- (b) How do knit fabrics differ from woven fabrics? $2 \times 5 = (10)$
- (c) Differentiate between warp and weft knits. (10)

[Total Marks = 30]