202

UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME	:	BACHELOR OF SCIENCE IN TEXTILE APPAREL DESIGN AND MANAGEMENT YEAR II
COURSE CODE	:	TADM 206
TITLE OF PAPER	:	FABRIC CONSTRUCTION
TIME ALLOWED	:	TWO (2) HOURS
INSTRUCTIONS	:	ANSWER QUESTION ONE (1) AND ANY OTHER TWO (2) QUESTIONS

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

QUESTION 1 (COMPULSORY)

a) Discuss **five (5)** characteristics of nonwoven fabrics. **(10 Marks)**

b) Give a lesson to a form two class on instructions they would follow to knit 5 cm of following specimens:
i) Increasing and deceasing
ii) Cable stich
iii) Block stitch
iv) Diamond stitch **(4 X 5 = 20 Marks)**

c) Explain the reasons why winding is necessary for some yarns although it is not a value addition process. **(10 Marks)**

[TOTAL MARKS = 40]

QUESTION 2

a) Describe **five (5)** advantages of weaving as a fabrication method. **(10 Marks)**

b) Explain what happens to the yarn during winding at the:

i) Tension and clearing zone
ii) Winding Zone **(6 Marks)**

c) Name and explain causes of **five (5)** defects on woven fabrics. **(10 Marks)**

d) Differentiate between pile and napped fabrics. **(4 Marks)**

[TOTAL MARKS = 30]

QUESTION 3

a) Compare the methods of processing staple and filament yarns. **(10 Marks)**

b) Define the following terms:

i) A creel
ii) A shuttle
iii) A pirn
iv) A shed
v) A reed **(10 Marks)**

c) Differentiate between the following terms:

i) Warping and winding
ii) Composite and fancy yarns
iii) Carding and combing
iv) Balanced and unbalanced weaves
v) Staple and filament yarns **(10 marks)**

[TOTAL MARKS = 30]

QUESTION 4

a) Compare the following weave designs: plain, warp, basket, twill and satin weaves on the following properties, assuming the fabric count or linear density are the same.

i) Tensile strength
ii) Hand
iii) Tear resistance

(3 X 5 = 15 Marks)

b) Explain how the structure of yarns spun using the **three (3)** main methods influence their performance characteristics **(3 X 5 = 15 Marks)**

[TOTAL MARKS = 30]