



**UNIVERSITY OF SWAZILAND**  
**FINAL EXAMINATION PAPER**

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

**COURSE CODE :** TAD206

**TITLE OF PAPER :** FABRIC CONSTRUCTION

**TIME ALLOWED :** TWO (2) HOURS

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

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THE CHIEF INVIGILATOR**

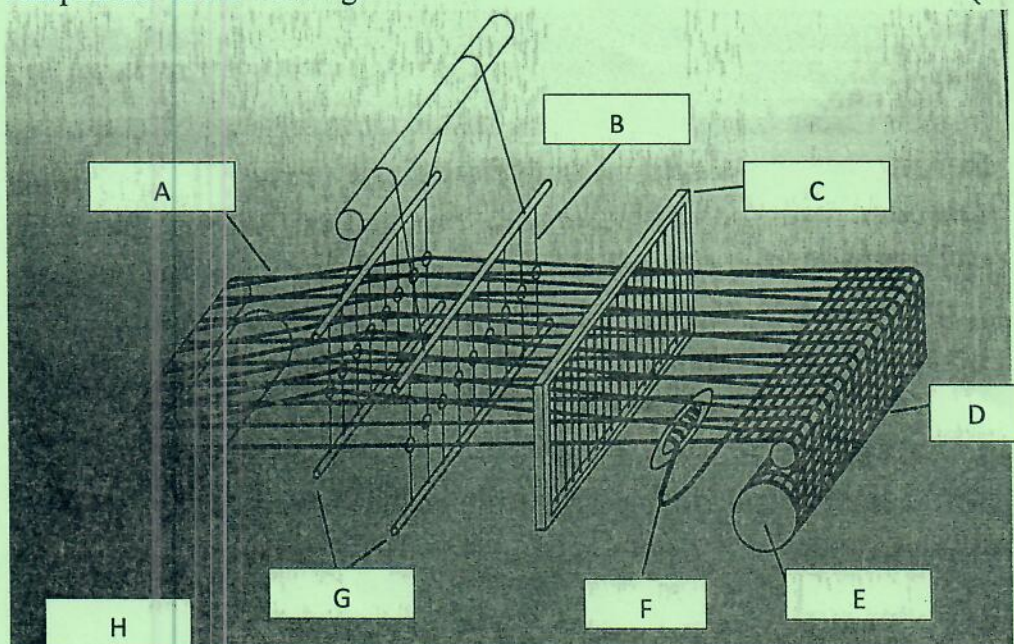
**QUESTION 1 (COMPULSORY)**

- a) The African Textile Industry is faced with many challenges, briefly discuss any **five (5)** challenges facing the African Textile Industry **(10 Marks)**
- b) Name and describe **two (2)** types of blending **(4 Marks)**
- c) What are some of the requirements for warping? **(4 Marks)**
- d) Give a detailed explanation of the following
  - i. sectional warping
  - ii. direct warping **(5x2= 10 Marks)**
- e) Briefly describe the two main actions in the cotton carding process giving examples where each action occurs **(10 Marks)**
- f) What is the role of a wetting agent in a size mix? **(2 Marks)**

**[TOTAL MARKS = 40]**

**QUESTION 2**

- a) Describe the appearance of the following basic knitted stitches **(3x3= 9 Marks)**
  - i. Knit stitch
  - ii. Purl stitch
  - iii. Float stitch
- b) Briefly describe your understanding of weft knitting and give **three (3)** examples of weft knitted base structures **(9 Marks)**
- c) Name **four (4)** objectives of sizing yarn before weaving can take place **(4 Marks)**
- d) The diagram below shows the basic weaving mechanism. Label the various components of the weaving machine. **(8 Marks)**



**[TOTAL MARKS =30]**

**QUESTION 3**

- a) Briefly describe the canvas method of weave representation on paper (6 Marks)
- b) Name and briefly describe the **three (3)** basic elements of a woven design (12 Marks)
- c) Give **four (4)** differences between Raschel and Tricot machines (8 Marks)
- d) Name **four (4)** different types of shuttless looms (4 Marks)

[TOTAL MARKS = 30]

**QUESTION 4**

- a) Combing is one of the preparatory processes done in Ring spinning. What are the objectives of carrying out combing? (4 Marks)
- b) With the aid of diagrams describe **three (3)** types of needles that can be used in machine knitting (12 Marks)
- c) Give **five (5)** advantages that shuttles looms have over traditional looms (5 Marks)
- d) Briefly describe the following types of selvages (6 Marks)
  - i. Tucked
  - ii. Leno
  - iii. Fused
- e) Name any **three (3)** most common defects which can appear during the weaving operation (3 Marks)

[TOTAL MARKS =30]