

Name TEXTILE DEPT

Index No. _____

2803/102

Candidate's Signature _____

**TEXTILE SCIENCE I AND CLOTHING
CONSTRUCTION I THEORY**

Date _____

Oct/Nov, 2014

Time: 3 hours



HEAD OF DEPARTMENT
CLOTHING & TEXTILES

(1)

THE KENYA NATIONAL EXAMINATIONS COUNCIL

**DIPLOMA IN FASHION DESIGN AND CLOTHING TECHNOLOGY
MODULE I**

TEXTILE SCIENCE I AND CLOTHING CONSTRUCTION I THEORY

3 hours

INSTRUCTIONS TO CANDIDATES

Write your name and index number in the spaces provided above.

Sign and write the date of examination in the spaces provided above.

This paper consists of **EIGHT** questions in **TWO** sections; **A** and **B**.

Answer any **THREE** questions from section **A** and any **TWO** questions from section **B** in the spaces provided in this question paper.

Maximum marks for each part of a question are as shown.

Candidates should answer the questions in English.

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A		20	
		20	
		20	
B		20	
		20	
TOTAL SCORE			

This paper consists of 20 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A: TEXTILE SCIENCE 1 (60 marks)

Answer any **THREE** questions from this section.

1. (a) Explain five preparatory processes undertaken before dyeing a loom state cotton yarn. (10)
- (b) Describe the following citing one use in each case: **PEC**
- (i) cord yarns; (2)
- (ii) textured yarns; (2)
- (iii) fancy yarns. (2)
- (c) Outline four objectives of 'drawing' in yarn formation. (4)
2. (a) Outline the procedure for carrying out the 'tie and dye' process. (6)
- (b) Identify five causes of defects during the following processes:
- (i) weaving; (5)
- (ii) dyeing. (5)
- (c) Outline four characteristics of a textile fabric suitable for a doormat. (4)
3. (a) Distinguish between 'direct' and 'indirect' yarn numbering systems. (4)
- (b) Explain the following tie and dye techniques:
- (i) tritiking; (2)
- (ii) marbling; (2)
- (iii) ruching. (2)
- (c) Explain two objectives for each of the following fabric processes:
- (i) sizing; (4)
- (ii) shearing. (4)
- (d) Highlight two behaviour characteristics of protein fibres in a burning test. (2)

4. (a) Explain **two** causes of each of the following fibre properties:
- (i) electrostaticity; (4 marks)
 - (ii) absorbency; (4 marks)
 - (iii) cover factor. (4 marks)
- (b) Explain the following terms in relation to dyeing:
- (i) fastness; (2 marks)
 - (ii) absorption. (2 marks)
- (c) Outline **two** advantages and **two** disadvantages of batik as a colour application method. (4 marks)
5. (a) Explain **two** factors that contribute to each of the following properties in a woven fabric:
- (i) strength; (4 marks)
 - (ii) dimensional stability. (4 marks)
- (b) Outline **two** advantages of fibre dyeing. (4 marks)
- (c) Explain **four** objectives of fabric finishing. (8 marks)

SECTION B: CLOTHING CONSTRUCTION I (40 marks)

Answer any TWO questions from this section.

6. (a) Explain the following processes:
- (i) fusing; (2 marks)
 - (ii) layering; (2 marks)
 - (iii) sink stitching. (2 marks)
- (b) Highlight **two** advantages of self neatened seams. (4 marks)
- (c) (i) Highlight **two** objectives of lubricating sewing machines. (4 marks)
- (ii) Describe the 'manual' and 'automatic' methods of lubricating machines citing **one** advantage in each case. (6 marks)

7. (a) Outline four safety measures to observe when using a sewing machine.
— should be in one dust coat
- (b) Describe the two main types of waistbands.
- (c) Outline the assembly procedure for a blouse with the following features:
- (i) back neck slit opening;
 - (ii) bound pockets;
 - (iii) bias bound armholes;
 - (iv) faced hem;
 - (v) darts.
- (d) Identify three objectives of finishing a garment.
8. (a) Explain three ways of reinforcing a pleat.
- (b) Distinguish between the following:
- (i) inserted pockets and applied pockets;
 - (ii) interfacing and facing.
- (c) Outline the procedure for making a french seam.