

2803/102

TEXTILE SCIENCE I AND
CLOTHING CONSTRUCTION I THEORY

June/July 2020

Time: 3 hours



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

This question paper consists of TWO sections: A and B.

Answer any THREE questions from section A and any TWO questions from section B in the answer booklet provided.

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

Candidates should answer the questions in English.

This paper consists of 3 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 I (60 marks)

Answer any THREE questions from this section.

1. (a) Explain **three** factors which determine the properties of fibres. (6 marks)
- (b) Describe each of the following types of yarns:
- (i) core spun; (2 marks)
- (ii) slub. (2 marks)
- (c) Outline **five** effects of high twist on cotton yarns. (5 marks)
- (d) Identify **five** end uses of wool fibres. (5 marks)
2. (a) (i) Outline **four** shortcomings of chemical tests in fibre identification. (4 marks)
- (ii) Highlight **two** objectives of the fabric chemical test. (2 marks)
- (b) (i) Outline **four** uses of fancy yarns. (4 marks)
- (ii) Highlight **four** advantages of dyed yarns. (4 marks)
- (c) Explain **three** causes of fabric shrinkage. (6 marks)
3. (a) Describe each of the following processes:
- (i) singeing; (2 marks)
- (ii) desizing; (2 marks)
- (iii) dyeing. (2 marks)
- (b) Explain **five** factors which contribute to a correctly dyed fabric. (10 marks)
- (c) Outline **four** characteristics of lace fabrics. (4 marks)
4. (a) Identify **five** uses of threads. (5 marks)
- (b) Explain **four** causes of yarn defects. (8 marks)
- (c) Outline **three** ways of inserting weft yarns during fabric construction. (3 marks)
- (d) Explain **two** factors which determine the covering power of a fabric. (4 marks)
5. (a) Highlight **four** characteristics of satin fabrics. (4 marks)
- (b) Outline **four** types of temporary finishes in fabrics. (4 marks)

- (c) Explain **three** reasons for the high cost of silk fibres. (6 marks)
- (d) (i) Describe **three** characteristics of batik fabrics. (3 marks)
- (ii) Identify **three** tools required in a batik process. (3 marks)

SECTION B: CLOTHING CONSTRUCTION I (40 marks)

Answer any TWO questions from this section.

6. (a) Outline **five** areas where elastic can be applied on a garment. (5 marks)
- (b) Highlight **five** situations in garment making when hand stitches may be necessary. (5 marks)
- (c) Outline **five** ways of finishing the hem of a sports trouser. (5 marks)
- (d) Identify **five** types of infections a First-Aider can easily contract during First Aid. (5 marks)
7. (a) Outline **three** workshop conditions which can contribute to poor quality of garments. (6 marks)
- (b) Explain **four** uses of trimmings on a garment. (8 marks)
- (c) Explain **three** factors which govern the choice of pockets. (6 marks)
8. (a) Explain **five** factors which determine the choice of seams for garments. (10 marks)
- (b) Highlight **five** causes of bobbin thread breakage. (5 marks)
- (c) Outline **five** factors to consider when choosing fasteners. (5 marks)

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